

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 23, 2004, 10:56:47 ; Search time 89 Seconds
(without alignments)
25.398 Million cell updates/sec

Title: VARIANT1

Perfect score: 25

Sequence: 1 XQXXVXHL 8

Scoring table: BLOSUM62DX

Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Listing first 200 summaries

Database :

A_Geneseq_29Jan04:*
1: geneeqp1980s:*
2: geneeqp1990s:*
3: geneeqp2000s:*
4: geneeqp2001s:*
5: geneeqp2002s:*
6: geneeqp2003as:*
7: geneeqp2003bs:*
8: geneeqp2004s:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	DB ID	Description
1	25	100.0	8 2 AAR04531	Aar04531 Non-cycli
2	25	100.0	8 2 AAR11224	Aar11224 Linear li
3	25	100.0	8 2 AAR11241	Aar11241 Linear li
4	25	100.0	8 2 AAR11240	Aar11240 Linear li
5	25	100.0	8 2 AAR11242	Aar11242 Linear li
6	25	100.0	8 2 AAR14877	Aar14877 Peptide a
7	25	100.0	8 2 AAR29157	Aar29157 Bombesin
8	25	100.0	8 2 AAR29155	Aar29155 Bombesin
9	25	100.0	8 2 AAR64910	Aar64910 Bombesin
10	25	100.0	8 2 AAR64911	Aar64911 Bombesin
11	25	100.0	8 2 AAR50941	Aar50941 Bombesin
12	25	100.0	8 2 AAR92740	Aar92740 Bombesin
13	25	100.0	8 3 AAR08307	Aar08307 Amino aci
14	25	100.0	8 3 AAR08308	Aar08308 Amino aci
15	25	100.0	8 3 AAR08302	Aar08302 Amino aci
16	25	100.0	8 4 AAB91910	Aab91910 Bombesin
17	25	100.0	8 4 AAE10465	AAe10465 Synthetic
18	25	100.0	8 4 AAE10465	AAe10465 Synthetic
19	25	100.0	8 4 AAE10468	AAe10468 Synthetic
20	25	100.0	8 4 AAE10470	AAe10470 Synthetic
21	25	100.0	8 4 AAE10463	AAe10463 Synthetic
22	25	100.0	8 4 AAE10471	AAe10471 Synthetic
23	25	100.0	8 4 AAE10464	AAe10464 Synthetic
24	25	100.0	8 4 AAE10472	AAe10472 Synthetic
25	25	100.0	8 5 ABB06687	Abb06687 Bombesin/

26	25	100.0	8 5 ABB06690	Abb06690 Bombesin/
27	25	100.0	8 5 ABB06688	Abb06688 Bombesin/
28	25	100.0	8 5 ABB06670	Abb06670 Bombesin/
29	25	100.0	8 5 ABB06689	Abb06689 Bombesin/
30	25	100.0	8 6 ABE72336	ABe72336 Bombesin
31	25	100.0	8 7 ABU08880	ABu08880 Antiangio
32	25	100.0	8 7 ABU08879	ABu08879 Antiangio
33	25	100.0	8 7 ADD70039	Add70039 Bombesin/
34	25	100.0	8 7 ADD70038	Add70038 Bombesin/
35	25	100.0	8 7 ADD70033	Add70033 Bombesin/
36	25	100.0	8 7 ADD70007	Add70007 Bombesin/
37	25	100.0	8 7 ADD70003	Add70003 Bombesin/
38	25	100.0	8 7 ADD70014	Add70014 Bombesin/
39	25	100.0	8 7 ADD70031	Add70031 Bombesin/
40	25	100.0	8 7 ADD70017	Add70017 Bombesin/
41	25	100.0	8 7 ADD70018	Add70018 Bombesin/
42	25	100.0	8 7 ADD70006	Add70006 Bombesin/
43	25	100.0	8 7 ADD70013	Add70013 Bombesin/
44	25	100.0	8 7 ADD70015	Add70015 Bombesin/
45	25	100.0	8 7 ADD70012	Add70012 Bombesin/
46	25	100.0	9 2 AAR09335	Aar09335 Sequence
47	25	100.0	9 2 AAR04527	Aar04527 Non-cycli
48	25	100.0	9 2 AAR04530	Aar04530 Non-cycli
49	25	100.0	9 2 AAR04526	Aar04526 Non-cycli
50	25	100.0	9 2 AAR04528	Aar04528 Non-cycli
51	25	100.0	9 2 AAR04529	Aar04529 Non-cycli
52	25	100.0	9 2 AAR08345	Aar08345 Peptide b
53	25	100.0	9 2 AAR12033	Aar12033 Bombesin
54	25	100.0	9 2 AAR14866	Aar14866 Peptide a
55	25	100.0	9 2 AAR14867	Aar14867 Peptide a
56	25	100.0	9 2 AAR14876	Aar14876 Peptide a
57	25	100.0	9 2 AAR14860	Aar14860 Peptide a
58	25	100.0	9 2 AAR14865	Aar14865 Peptide a
59	25	100.0	9 2 AAR14863	Aar14863 Peptide a
60	25	100.0	9 2 AAR14864	Aar14864 Peptide a
61	25	100.0	9 2 AAR14862	Aar14862 Peptide a
62	25	100.0	9 2 AAR14880	Aar14880 Cyclic an
63	25	100.0	9 2 AAR14872	Aar14872 Peptide a
64	25	100.0	9 2 AAR15038	Aar15038 Cyclic an
65	25	100.0	9 2 AAR14861	Aar14861 Peptide a
66	25	100.0	9 2 AAR14873	Aar14873 Peptide a
67	25	100.0	9 2 AAR11521	Aar11521 Example o
68	25	100.0	9 2 AAR11522	Aar11522 Example o
69	25	100.0	9 2 AAR11529	Aar11529 Example o
70	25	100.0	9 2 AAR11525	Aar11525 Example o
71	25	100.0	9 2 AAR11520	Aar11520 Example o
72	25	100.0	9 2 AAR24488	Aar24488 Example o
73	25	100.0	9 2 AAR24489	Aar24489 Example o
74	25	100.0	9 2 AAR24487	Aar24487 Example o
75	25	100.0	9 2 AAR24462	Aar24462 Example o
76	25	100.0	9 2 AAR24458	Aar24458 Example o
77	25	100.0	9 2 AAR24491	Aar24491 Example o
78	25	100.0	9 2 AAR24448	Aar24448 Example o
79	25	100.0	9 2 AAR24490	Aar24490 Example o
80	25	100.0	9 2 AAR24460	Aar24460 Example o
81	25	100.0	9 2 AAR24486	Aar24486 Example o
82	25	100.0	9 2 AAR24492	Aar24492 Example o
83	25	100.0	9 2 AAR24673	Aar24673 Example o
84	25	100.0	9 2 AAR24483	Aar24483 Example o
85	25	100.0	9 2 AAR24493	Aar24493 Example o
86	25	100.0	9 2 AAR24461	Aar24461 Example o
87	25	100.0	9 2 AAR24674	Aar24674 Example o
88	25	100.0	9 2 AAR24650	Aar24650 Example o
89	25	100.0	9 2 AAR24454	Aar24454 Example o
90	25	100.0	9 2 AAR24463	Aar24463 Example o
91	25	100.0	9 2 AAR24487	Aar24487 Example o
92	25	100.0	9 2 AAR24484	Aar24484 Example o
93	25	100.0	9 2 AAR29152	Aar29152 Example o
94	25	100.0	9 2 AAR29151	Aar29151 Example o
95	25	100.0	9 2 AAR29154	Aar29154 Example o
96	25	100.0	9 2 AAR29153	Aar29153 Example o
97	25	100.0	9 2 AAR43757	Aar43757 MHC Class
98	25	100.0	9 2 AAR40901	Aar40901 Bombesin

99	25	100.0	9	2	AAR40902
100	25	100.0	9	2	AAR40903
101	25	100.0	9	2	AAR40907
102	25	100.0	9	2	AAR40908
103	25	100.0	9	2	AAR40905
104	25	100.0	9	2	AAR40906
105	25	100.0	9	2	AAR59105
106	25	100.0	9	2	AAR69367
107	25	100.0	9	2	AAR69366
108	25	100.0	9	2	AAR69369
109	25	100.0	9	2	AAR69365
110	25	100.0	9	2	AAR69368
111	25	100.0	9	2	AAR47619
112	25	100.0	9	2	AAR69564
113	25	100.0	9	2	AAV01936
114	25	100.0	9	2	AAW00310
115	25	100.0	9	2	AAW00307
116	25	100.0	9	2	AAW39675
117	25	100.0	9	2	AAW51201
118	25	100.0	9	2	AAW51206
119	25	100.0	9	2	AAW51195
120	25	100.0	9	2	AAW51193
121	25	100.0	9	2	AAW51200
122	25	100.0	9	2	AAW51207
123	25	100.0	9	2	AAW51212
124	25	100.0	9	2	AAW51209
125	25	100.0	9	2	AAW51194
126	25	100.0	9	2	AAW54742
127	25	100.0	9	2	AAV17045
128	25	100.0	9	2	AAW92738
129	25	100.0	9	3	AAV44955
130	25	100.0	9	4	AAW96028
131	25	100.0	9	5	ABW06668
132	25	100.0	9	7	ADD70041
133	25	100.0	9	7	ADD70005
134	25	100.0	9	7	ADD70008
135	25	100.0	9	7	ADD70028
136	25	100.0	9	7	ADD70011
137	25	100.0	9	7	ADD70023
138	25	100.0	9	7	ADD70010
139	25	100.0	9	7	ADD70032
140	25	100.0	9	7	ADD70021
141	25	100.0	9	7	ADD70029
142	25	100.0	10	1	AAW96113
143	25	100.0	10	2	AAW04533
144	25	100.0	10	2	AAW50618
145	25	100.0	10	4	ABW6029
146	25	100.0	10	5	ABW06675
147	25	100.0	10	7	ADD70036
148	25	100.0	11	3	AAW82106
149	25	100.0	11	4	AAW19953
150	25	100.0	11	4	AAW19954
151	25	100.0	11	4	AAW69152
152	25	100.0	11	4	AAW69153
153	25	100.0	11	4	AAW71697
154	25	100.0	11	4	AAW71698
155	25	100.0	11	4	AAW70512
156	25	100.0	11	4	AAW70511
157	25	100.0	11	4	AAW73422
158	25	100.0	11	4	AAW73423
159	25	100.0	11	4	AAW07321
160	25	100.0	11	4	AAW07320
161	25	100.0	11	4	AAW67682
162	25	100.0	11	4	AAW67681
163	25	100.0	11	4	AAW07134
164	25	100.0	11	4	AAW07135
165	25	100.0	11	4	AAW73428
166	25	100.0	11	4	AAW73429
167	25	100.0	11	4	AAW65285
168	25	100.0	11	4	AAW65284
169	25	100.0	11	5	AAU97454
170	25	100.0	11	5	AAU97455
171	25	100.0	11	6	ABU09468

AAR40902	Bombesin
AAR40903	Bombesin
AAR40907	Bombesin
AAR40908	Bombesin
AAR40905	Bombesin
AAR40906	Bombesin
AAR59105	Peptide f
AAR69367	Bombesin
AAR69366	Bombesin
AAR69369	Bombesin
AAR69365	Bombesin
AAR69368	Bombesin
AAR47619	Bombesin-
AAR69564	[D-Trip6,
AAV01936	Peptide a
AAW00310	Bombesin
AAW00307	Bombesin
AAW39675	HPV18 E7
AAW51201	Peptide d
AAW51206	Peptide d
AAW51195	Peptide d
AAW51193	Peptide d
AAW51200	Peptide d
AAW51207	Peptide d
AAW51212	Licorin (
AAW51209	Peptide d
AAW51194	Peptide d
AAW54742	Peptide f
AAV17045	HPV anti-f
AAW92738	Bombesin
AAV44955	Human pap
AAW96028	HPV 18 E7
ABW06668	Bombesin/
ADD70041	Bombesin/
ADD70005	Bombesin/
ADD70008	Bombesin/
ADD70028	Bombesin/
ADD70011	Bombesin/
ADD70023	Bombesin/
ADD70010	Bombesin/
ADD70032	Bombesin/
ADD70021	Bombesin/
ADD70029	Bombesin/
AAW96113	Sequence
AAW04533	Non-cycli
AAW50618	Bombesin
ABW6029	HPV 18 E7
ABW06675	Amphibian
ADD70036	Therapeut
AAW82106	Bombesin
AAW19953	Bombesin
AAW19954	Bombesin
AAW69152	Bombesin
AAW69153	Bombesin
AAW71697	Bombesin
AAW71698	Bombesin
AAW70512	Bombesin
AAW70511	Bombesin
AAW73422	Bombesin
AAW73423	Bombesin
AAW07321	Bombesin
AAW07320	Bombesin
AAW67682	Amino aci
AAW67681	Amino aci
AAW07134	Bombesin
AAW07135	Bombesin
AAW73428	Bombesin
AAW73429	Bombesin
AAW65285	Bombesin
AAW65284	Bombesin
AAU97454	Synthetic
AAU97455	Synthetic
ABU09468	Bombesin

172	25	100.0	11	6	ABU09467
173	25	100.0	11	6	ABR42465
174	25	100.0	11	6	ABR42464
175	25	100.0	11	6	ABR55703
176	25	100.0	11	6	ABR55704
177	25	100.0	11	6	ABR44098
178	25	100.0	11	6	ABR44099
179	25	100.0	11	7	ABR82872
180	25	100.0	11	7	ABR82871
181	25	100.0	11	7	ADD70000
182	25	100.0	12	3	AAV92995
183	25	100.0	12	3	AAV92996
184	25	100.0	12	3	AAV82107
185	25	100.0	13	4	AAW91906
186	25	100.0	13	4	AAW91913
187	25	100.0	13	6	ABG72845
188	25	100.0	14	1	AAW80311
189	25	100.0	14	2	AAW829587
190	25	100.0	14	2	AAW47617
191	25	100.0	14	2	AAW64900
192	25	100.0	14	2	AAW11504
193	25	100.0	14	2	AAW04621
194	25	100.0	14	2	AAW50621
195	25	100.0	14	2	AAW50965
196	25	100.0	14	2	AAW50959
197	25	100.0	14	2	AAW50957
198	25	100.0	14	2	AAW52611
199	25	100.0	14	2	AAW92732
200	25	100.0	14	2	AAV31061

ALIGNMENTS

RESULT 1	
AAW04531	
ID	AAW04531 standard; protein; 8 AA.
XX	
AC	AAW04531;
XX	
DT	25-MAR-2003 (revised)
DT	24-SEP-1990 (first entry)
XX	
DE	Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX	
KW	Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KW	therapeutic peptides.
XX	
OS	Synthetic.
XX	
FH	Key
FT	Modified-site 1
FT	Location/Qualifiers
XX	
XX	label= D-phenylalanine
XX	
XX	MO9003980-A.
XX	
PD	19-APR-1990.
XX	
XX	14-OCT-1988; 88US-00257998.
XX	
XX	14-OCT-1988; 88US-00257998.
PR	09-DEC-1988; 88US-00282328.
PR	02-MAR-1989; 89US-00317941.
PR	07-JUL-1989; 89US-00376555.
PR	21-AUG-1989; 89US-00397169.
XX	
XX	
XX	(TULIA) TULANE EDUCATIONAL FUND.
PA	(BIOM-) BIOMESURE INC.
XX	
XX	Coy DR, Moreau JP, Taylor JB, Kim SH;
XX	
XX	WPI; 1990-147822/19.
XX	

PT	New non-cyclic analogues of mammalian gastrin-releasing peptide - and amphibian bombesin, used for cancer treatment, e.g. small cell lung carcinoma, atherosclerosis and gastrointestinal disorders.
PS	Claim 21; Page 55; 68pp; English.
CC	C-terminal = ethylamide or amide. The peptide has an active site and a binding site for binding to a target cell receptor, and has one of the following modifications: (a) a deletion of a residue within the active site and a modification of a residue outside of the active site; and (b) a replacement of 1 or 2 residues within the active site with a synthetic amino acid. On binding to its receptor, the analogue acts as a competitive inhibitor of the naturally occurring peptide but due to the modifications, fails to exhibit the normal <i>in vivo</i> biological activity.
CC	The peptides are useful for the treatment of benign or malignant proliferation of tissues, eg cancers of the gastrointestinal tract, pancreatic cancer, colon cancer, lung cancer or breast cancer; for the treatment of atherosclerosis; and disorders of the gastrointestinal tissues. This peptide is a claimed example of a highly generic formula.
CC	See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
CC	(Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to correct PI field.)
XX	
SQ	Sequence 8 AA:
OY	Query Match 100.0%; Score 25; DB 2; Length 8; Best Local Similarity 50.0%; Pred. No. 1.4e+06;
DB	Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0; 1 XOXVXHL 8 1 FQWAVGHL 8
RESULT 2	
AAR11224	AAR11224 standard; protein; 8 AA.
AC	AAR11224;
DT	17-MAY-1991 (first entry)
DE	Linear litorin analogue.
KW	Bombesin; litorin analogue; linear; receptor affinity; cancer; diabetes.
OS	Synthetic.
XX	
FH	Key Location/Qualifiers
FT	Misc-difference 1..1
FT	/label= D-D-chloro-phenylalanined
XX	
FN	WO9102746-A.
XX	
PD	07-MAR-1991.
XX	
PJ	21-AUG-1989; 89US-00397169.
PR	21-AUG-1989; 89US-00397169.
PR	30-MAR-1990; 90US-00502438.
XX	
PA	(BIOM-) BIOMEASURE INC.
PA	(TULIA) ADMIN TULANE EDUCATIONAL.
XX	
PI	Coy DH, Moreau JP, Kim SH;
DR	WPI; 1991-087241/12.
XX	
PT	New linear peptide analogues of bombesin - modified to eliminate biological activity while retaining receptor affinity, for treating cancer, diabetes, etc.
XX	
BS	Claim 13; Page 53; 58pp; English.

XX	CC	XX	This peptide is a specifically claimed example of a generic formula. The C-terminal amino acid (Met) of the naturally occurring peptide has been converted to an amide and Phe 8 has been replaced by statine. The peptide is useful for treating benign or malignant tissue proliferation, atherosclerosis, gastrointestinal disorders and diabetes. They act as competitive inhibitors of natural peptides, since they bind to the cell receptors but have no biological activity	XX
XX	CC	XX	Sequence 8 AA;	XX
XX	CC	XX	Query Match	XX
XX	CC	XX	Best Local Similarity	XX
XX	CC	XX	Matches	XX
XX	CC	XX	Score 25; DB 2; Length 8;	XX
XX	CC	XX	62.5%; Pred. No. 1.4e+06;	XX
XX	CC	XX	Conservative	XX
XX	CC	XX	3; Mismatches	XX
XX	CC	XX	0; Indels	XX
XX	CC	XX	0; Gaps	XX
XX	CC	XX	0;	XX
XX	CC	XX	1 XQXXVXHL 8	XX
XX	CC	XX	1 XQWAVGHL 8	XX
XX	CC	XX	RESULT 3	XX
XX	CC	XX	AAR11241	XX
XX	CC	XX	AAR11241 standard; protein; 8 AA.	XX
XX	CC	XX	AAR11241;	XX
XX	CC	XX	17-MAY-1991 (first entry)	XX
XX	CC	XX	Linear litorin analogue (III).	XX
XX	CC	XX	Bombesin, litorin analogue; linear; receptor affinity; cancer; diabetes.	XX
XX	CC	XX	Synthetic.	XX
XX	CC	XX	Key	XX
XX	CC	XX	Location/Qualifiers	XX
XX	CC	XX	Modified-site	XX
XX	CC	XX	1..11	XX
XX	CC	XX	/label= D-p-chloro-phenylalanine	XX
XX	CC	XX	WO9102746-A.	XX
XX	CC	XX	07-MAR-1991.	XX
XX	CC	XX	21-AUG-1989;	XX
XX	CC	XX	89US-00397169.	XX
XX	CC	XX	21-AUG-1989;	XX
XX	CC	XX	89US-00397169.	XX
XX	CC	XX	30-MAR-1990;	XX
XX	CC	XX	90US-00502438.	XX
XX	CC	XX	(BIOM-) BIOMESURE INC.	XX
XX	CC	XX	(TUDA) ADMIN TUDANE EDUCATIONAL.	XX
XX	CC	XX	Coy DH, Moreau JP, Kim SH;	XX
XX	CC	XX	WPI; 1991-087241/12.	XX
XX	CC	XX	New linear peptide analogues of bombesin - modified to eliminate biological activity while retaining receptor affinity, for treating cancer, diabetes, etc.	XX
XX	CC	XX	Claim 18; Page 54; 58pp; English.	XX
XX	CC	XX	This peptide is a specifically claimed example of a generic formula. The C-terminal amino acid (Met) of the naturally occurring peptide has been converted to an amide and Phe 8 has been replaced by beta-Leu. Gly 6 has also been replaced by D-Ala. The peptide is useful for treating benign or malignant tissue proliferation, atherosclerosis, gastrointestinal disorders and diabetes. They act as competitive inhibitors of natural peptides, since they bind to the cell receptors but have no biological activity. The analogue may also be of a naturally occurring peptide terminating at the C-terminus with a Met residue, such as the 10 amino acid C-terminal region of mammalian GRP or amphibian bombesin. See also AAR11239-242	XX
XX	CC	XX	Sequence 8 AA;	XX

Query Match 100.0%; Score 25; DB 2; Length 8;
 Best Local Similarity 62.5%; Pred. No. 1.4e+06;
 Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 :|::|:
 Db 1 XQWAVVHL 8

RESULT 4

AA11240
 ID AA11240 standard; protein; 8 AA.

XX AA11240;

DT 17-MAY-1991 (first entry)

DE Linear litorin analogue (II).

XX Bombesin; litorin analogue; linear; receptor affinity; cancer; diabetes.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1..1
 FT /label= D-p-chloro-phenylalanine

XX W09102746-A.

XX 07-MAR-1991.

XX 21-AUG-1989; 89US-00397169.

XX 21-AUG-1989; 89US-00397169.

XX 30-MAR-1990; 90US-00502438.

XX (BIOM-) BIOMEASURE INC.

XX (TULA) ADMIN TULANE EDUCATIONAL.

XX Coy DH, Moreau JP, Kim SH;

XX WPI; 1991-087241/12.

XX New linear peptide analogues of bombesin - modified to eliminate
 PT biological activity while retaining receptor affinity, for treating
 PT cancer, diabetes, etc.

XX Claim 17; Page 53; 58pp; English.

XX This peptide is a specifically claimed example of a generic formula. The
 CC C-terminal amino acid (Met) of the naturally occurring peptide has been
 CC converted to an amide and Phe 8 has been replaced by beta-Ieu. The
 CC peptide is useful for treating benign or malignant tissue proliferation,
 CC atherosclerosis, gastrointestinal disorders and diabetes. They act as
 CC competitive inhibitors of natural peptides, since they bind to the cell
 CC receptors but have no biological activity. The analogue may also be of a
 CC naturally occurring peptide terminating at the C-terminus with a Met
 CC residue, such as the 10 amino acid C-terminal region of mammalian GRP or
 CC amphibian bombesin. See also AA11239-242

XX Sequence 8 AA;

Query Match 100.0%; Score 25; DB 2; Length 8;

Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 :|::|:
 Db 1 FQWAVVHL 8

, RESULT 5

AA11242
 ID AA11242 standard; protein; 8 AA.

XX AA11242;

DT 17-MAY-1991 (first entry)

DE Linear litorin analogue (IV).

XX Bombesin; litorin analogue; linear; receptor affinity; cancer; diabetes.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1..1
 FT /label= D-Phe, pentafluoro-Phe
 FT Modified-site 6..6
 FT /label= N-methyl-D-Ala

XX W09102746-A.

XX 07-MAR-1991.

XX 21-AUG-1989; 89US-00397169.

XX 21-AUG-1989; 89US-00397169.

XX 30-MAR-1990; 90US-00502438.

XX (BIOM-) BIOMEASURE INC.

XX (TULA) ADMIN TULANE EDUCATIONAL.

XX Coy DH, Moreau JP, Kim SH;

XX WPI; 1991-087241/12.

XX New linear peptide analogues of bombesin - modified to eliminate
 PT biological activity while retaining receptor affinity, for treating
 PT cancer, diabetes, etc.

XX Claim 20+21; Page 54; 58pp; English.

XX These peptides are specifically claimed examples of a generic formula.
 CC The C-terminal amino acid (Met) of the naturally occurring peptide has
 CC been converted to a methyl ester. The peptide is useful for treating
 CC benign or malignant tissue proliferation, atherosclerosis,
 CC gastrointestinal disorders and diabetes. They act as competitive
 CC inhibitors of natural peptides, since they bind to the cell receptors but
 CC have no biological activity. The analogue may also be of a naturally
 CC occurring peptide terminating at the C-terminus with a Met residue, such
 CC as the 10 amino acid C-terminal region of mammalian GRP or amphibian
 CC bombesin. See also AA11239-242

XX Sequence 8 AA;

Query Match 100.0%; Score 25; DB 2; Length 8;

Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 :|::|:
 Db 1 FQWAVVHL 8

RESULT 6

AA14877
 ID AA14877 standard; protein; 8 AA.

XX AA14877;

DT 25-MAR-2003 (revised)

DT 14-FEB-1992 (first entry)

XX Peptide analogue #18 of litorin, GRP, neuromedin or bombesin.

XX tissue proliferation; gastrin related peptide; peptide hormone.
KW Synthetic.
OS Key
XX Modified-site 1 Location/Qualifiers
FH /label= D-Phe
FT 8
FT Modified-site /label= OTHER
FT /note= "Leu-propylamide"
PN WO9117181-A.
XX 14-NOV-1991.
PD 09-MAY-1990; 90US-00520226.
PE 09-MAY-1990; 90US-00520226.
XX 09-MAY-1990; 90US-00520226.
PR 09-MAY-1990; 90US-00520226.
XX (TULANE EDUCATIONAL FUND.
PA (BIOM-) BIOMEDASURE INC.
XX Coy DH, Kim SH, Moreau J;
XX WPI, 1991-353721/48.
DR Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
XX C or bombesin, for treating cancer, preventing smooth muscle
PT proliferation and suppressing appetite and alcohol craving.
PS Claim 20; Page 19; 25pp; English.
XX This peptide is one of 27 specific examples of a highly generic formula.
CC The peptides are all analogues of either litorin; the 10 amino acid C-
CC terminal region of mammalian GRP, neuromedin B or neuromedin C; or the 10
CC amino acid C-terminal region of amphibian bombesin. They act as at least
CC partial agonists of the natural peptides. The peptide analogues are made
CC by standard methods of synthesis and can be cyclized. See ARI1460-R1480
CC and ARI1503-R15040. (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 8 AA;
Query Match 100.0%; Score 25; DB 2; Length 8;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHL 8
Db 1 FQMAVGH 8
RESULT 7
AAR29157
ID AAR29157 standard; peptide; 8 AA.
XX AAR29157;
AC 25-MAR-2003 (revised)
XX 16-APR-1993 (first entry)
DT 16-APR-1993 (first entry)
XX Bombesin analogue (6).
DE Hepatoma; liver cancer; antagonist.
XX Synthetic.
OS Key
XX Modified-site 1 Location/Qualifiers
FH /note= "D-P5-Phe"
FT Misc-difference 6
FT /note= "D-form residue"
FT Modified-site 8

FT /note= "Leu-Ome"
XX WO9220363-A1.
PN 26-NOV-1992.
XX 11-MAY-1992; 92WO-US003916.
XX 10-MAY-1991; 91US-00698681.
XX (BIOM-) BIOMEDASURE INC.
PA (TULANE EDUCATIONAL FUND.
XX Bodgen AE, Coy DH, Kim SH, Moreau J;
XX WPI, 1992-415466/50.
DR Treatment of hepatoma by admin. of admixed bombesin analogue with
XX carrier.
XX Claim 15; Page 48; 54pp; English.
XX The peptide is an example of a highly generic formula. It is used in a
CC medicament for treating hepatoma. The cpd. acts as antagonist to
CC bombesin, which has been detected in a number of human cancer lines.
CC (Updated on 25-MAR-2003 to correct PV field.)
XX
SQ Sequence 8 AA;
Query Match 100.0%; Score 25; DB 2; Length 8;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHL 8
Db 1 FQMAVGH 8
RESULT 8
AAR29155
ID AAR29155 standard; peptide; 8 AA.
XX AAR29155;
AC 25-MAR-2003 (revised)
XX 16-APR-1993 (first entry)
DT Bombesin analogue (5).
DE Hepatoma; liver cancer; antagonist.
XX Synthetic.
OS Key
XX Modified-site 1 Location/Qualifiers
FH /note= "D-form residue"
FT Modified-site 6
FT /note= "Nme-D-Ala"
FT Modified-site 8
FT /note= "Leu-Ome"
PN WO9220363-A1.
XX 26-NOV-1992.
PD 11-MAY-1992; 92WO-US003916.
XX 10-MAY-1991; 91US-00698681.
XX (BIOM-) BIOMEDASURE INC.
PA (TULANE EDUCATIONAL FUND.
XX Bodgen AE, Coy DH, Kim SH, Moreau J;

XX WPI, 1992-415466/50.
XX Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT carrier.
XX
PS Claim 14; Page 48; 54pp; English.
XX
CC The peptide is an example of a highly generic formula. It is used in a
CC medicament for treating hepatoma. The cpd. acts as antagonist to
CC bombesin, which has been detected in a number of human cancer lines.
CC (Updated on 25-MAR-2003 to correct PW field.)
XX
SQ Sequence 8 AA;
Query Match 100.0%; Score 25; DB 2; Length 8;
Best Local Similarity 50.0%; Pred. No. 1.4e+06; Indels 0; Gaps 0;
Matches 4; Conservative 4; Mismatches 0;
Qy 1 XQXXVXHL 8
:|::|:
1 FQMAVAHL 8
Db
RESULT 9
AAW64910
ID AAW64910 standard; peptide; 8 AA.
XX
AC AAW64910;
XX
DT 06-JUN-1999 (first entry)
XX
DE Bombesin receptor antagonist.
XX
KM Bombesin; antagonist; chlorambucil; peptic ulcer; pancreatitis;
KM eating disorder; diabetes; acromegaly; enterocutaneous fistula;
KM psoriasis; growth retardation; gastrointestinal motility disorder;
KM antitumour.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
/note= "The amino terminal is acylated with acetyl,
FT bromoacetyl, chloroacetyl, [bis(2-chloroethyl)-amino] - L-
FT phenylalanine or a chlorambucil group"
FT Modified-site 8
/note= "The carboxy terminal is in the form of an ethyl
FT ester"
FT
XX W09500542-A1.
XX
PD 05-JAN-1995.
XX
PF 15-JUN-1994; 94WO-US006757.
XX
PR 18-JUN-1993; 93US-00078062.
PR 17-DEC-1993; 93US-00168390.
XX
PA (PEPT-) PEPTIDE TECHNOLOGIES CORP.
PI Knight M, Takahashi K, Chandrasekhar B;
XX WPI, 1995-052004/07.
XX
XX New bombesin, gastrin releasing peptide or Neuromedin B or C derivs. -
PT antagonists for treating conditions such as gastrointestinal disorders,
PT psoriasis and cancers.
XX
PS Claim 6; Page 34; 45pp; English.
XX
CC The patent discloses (1) the peptide sequence of bombesin (BBN), gastrin
CC releasing peptide (GRP), Neuromedin B or Neuromedin C, the peptide

CC sequence having a chlorambucil group attached to the amino terminal; (2)
CC a BBN receptor antagonist of formula R4-His-Tip-Ala-R1-R2-His-R3-CO-
CC CH2CH3; and (3) a BBN receptor antagonist of formula R4-Asn-R5-Tip-Ala-
CC Val-R2-His-Leu-CO-CH2CH3. In these formulae, R1 = Val or Thr; R2 = Gly or
CC D-Ala; R3 = Leu or Phe; R4 = N-acetyl, bromoacetyl, chloroacetyl, [bis(2-
CC chloroethyl)- amino]-L-phenylalanine or a chlorambucil group; and R5 =
CC Gln or His. The compounds act as potent BBN/GRP-like peptide antagonists.
CC They can be used to inhibit the growth of cells that are sensitive to the
CC growth-promoting effects of BBN, GRP or a related peptide such as
CC pancreatic cells, gastric cells, neurons, hypothalamic cells and
CC cancerous cells or tumours. They can also be used to inhibit the binding
CC of BBN, GRP or a related peptide to cells capable of such binding. They
CC can be used for treating e.g. peptic ulcer, pancreatitis, eating
CC disorders, diabetes, acromegaly, enterocutaneous fistula, psoriasis,
CC growth retardation, gastrointestinal motility disorders or tumours. The
CC terminal structures of the compounds protect them from in vivo
CC proteolysis and provide highly potent antagonist effects that persist for
CC extended periods of time upon administration
XX
SQ Sequence 8 AA;
Query Match 100.0%; Score 25; DB 2; Length 8;
Best Local Similarity 50.0%; Pred. No. 1.4e+06; Indels 0; Gaps 0;
Matches 4; Conservative 4; Mismatches 0;
Qy 1 XQXXVXHL 8
:|::|:
1 NQMAVGHHL 8
Db
RESULT 10
AAW64911
ID AAW64911 standard; peptide; 8 AA.
XX
AC AAW64911;
XX
DT 06-JUN-1999 (first entry)
XX
DE Bombesin receptor antagonist.
XX
KM Bombesin; antagonist; chlorambucil; peptic ulcer; pancreatitis;
KM eating disorder; diabetes; acromegaly; enterocutaneous fistula;
KM psoriasis; growth retardation; gastrointestinal motility disorder;
KM antitumour.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
/note= "The amino terminal is acylated with acetyl,
FT bromoacetyl, chloroacetyl, [bis(2-chloroethyl)-amino] - L-
FT phenylalanine or a chlorambucil group"
FT Modified-site 8
/note= "The carboxy terminal is in the form of an ethyl
FT ester"
FT
XX W09500542-A1.
XX
PD 05-JAN-1995.
XX
PF 15-JUN-1994; 94WO-US006757.
XX
PR 18-JUN-1993; 93US-00078062.
PR 17-DEC-1993; 93US-00168390.
XX
PA (PEPT-) PEPTIDE TECHNOLOGIES CORP.
PI Knight M, Takahashi K, Chandrasekhar B;
XX WPI, 1995-052004/07.
XX
XX New bombesin, gastrin releasing peptide or Neuromedin B or C derivs. -
PT antagonists for treating conditions such as gastrointestinal disorders,
PT

PT peoriatis and cancers.
XX
PS Claim 6; Page 34; 45pp; English.
XX
CC The patent discloses (1) the peptide sequence of bombesin (BBN), gastrin
CC releasing peptide (GRP), Neuromedin B or Neuromedin C, the peptide
CC sequence having a chlorambucil group attached to the amino terminal; (2)
CC a BBN receptor antagonist of formula R4-His-Tyr-Ala-R1-R2-His-R3-CO-
CC CH2CH3; and (3) a BBN receptor antagonist of formula R4-Nen-R5-Tyr-Ala-
CC Val-R6-His-Leu-CO-CH2CH3. In these formulae, R1 = Val or Thr; R2 = Gly or
CC D-Ala; R3 = Leu or Phe; R4 = N-acetyl, bromoacetyl, chloroacetyl, bis(2-
CC chloroethyl)-L-phenylalanine or a chlorambucil group; and R5 =
CC Gly or His. The compounds act as potent BBN/GRP-like peptide antagonists.
CC They can be used to inhibit the growth of cells that are sensitive to the
CC growth-promoting effects of BBN, GRP or a related peptide such as
CC pancreatic cells, gastric cells, neurons, hypothalamic cells and
CC cancerous cells or tumours. They can also be used to inhibit the binding
CC of BBN, GRP or a related peptide to cells capable of such binding. They
CC can be used for treating e.g. peptic ulcer, pancreatitis, eating
CC disorders, diabetes, acromegaly, enterocutaneous fistula, peoriatis,
CC growth retardation, gastrointestinal motility disorders or tumours. The
CC terminal structures of the compounds protect them from in vivo
CC proteolysis and provide highly potent antagonist effects that persist for
CC extended periods of time upon administration
XX
SQ Sequence 8 AA;
Query Match 100.0%; Score 25; DB 2; Length 8;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
Db 1 QQMAVAVHL 8
RESULT 11
AAW50941
ID AAW50941 standard; peptide; 8 AA.
XX
AC AAW50941;
XX
DT 31-JUL-1998 (first entry)
XX
DE Bombesin antagonist (BOM1).
XX
KM Vasoactive intestinal peptide; VIP; antagonist; somatostatin; bombesin;
KM Substance P; cancer; inhibition.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1
FT Modified-site 8 /note= "Leu-NHET"
FT
XX
XX EP835662-A2.
XX
XX 15-APR-1998.
XX
XX 11-DEC-1996; 96EP-00309012.
XX
XX 08-OCT-1996; 96US-00727679.
XX
XX (NAIM-). NAT INST IMMUNOLOGY.
XX
XX Mukherjee R, Jaggi M;
XX
XX WPI; 1998-208959/19.
XX
XX Composition containing analogues of vasoactive intestinal peptide,
PT somatostatin - bombesin and substance P, for treatment of tumours and for

PT inhibiting over-expression of these peptide(s).
XX
PS Claim 1; Page 4; 49pp; English.
XX
XX The invention relates to a new composition which comprises: (1) the
CC somatostatin analogue SOM2 AGCKNPFDMKTPRSDc (3-14 disulphide bridge), and
CC (11) at least 4 of the peptides: antagonist of vasoactive intestinal
CC peptide (VIP1); VIP receptor-binding inhibitor (VIP2); VIP receptor
CC antagonist (VIP3); somatostatin analogue (SOM1); bombesin antagonist
CC (BOM1) and substance P antagonist (SP1). Also claimed are more general
CC compositions containing peptide analogues of somatostatin, VIP, bombesin
CC and substance P. The compositions are used in human or veterinary
CC medicine: (a) to kill (or inhibit multiplication of) tumour or cancer
CC cells, particularly for treatment of leukaemia, lymphoma, adenocarcinoma
CC of stomach, pancreas or prostate, or cancer of lung, breast, kidney or
CC particularly rectum and colon, and (b) to prevent, inhibit or modulate
CC over-expression of, e.g. VIP. A wide range of cancer cells express
CC receptors for VIP, somatostatin, bombesin and/or substance P. The present
CC sequence represents bombesin antagonist (BOM1)
XX
SQ Sequence 8 AA;
Query Match 100.0%; Score 25; DB 2; Length 8;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
Db 1 QQMAVAVHL 8
RESULT 12
AAW92740
ID AAW92740 standard; peptide; 8 AA.
XX
AC AAW92740;
XX
DT 20-MAR-2003 (reviewed)
DT 30-APR-1999 (first entry)
XX
XX Bombesin peptide analogue #6.
XX
XX Bombesin; gastrin releasing peptide; GRP; GRF; litorin; proliferation;
XX growth hormone releasing factor; treatment; benign; malignant; tissue;
XX small-cell lung carcinoma; atherosclerosis; gastrointestinal disorder;
XX diabetes; diabetes related retinopathy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT Modified-site 8 /note= "methyllester C-terminus"
FT
XX
XX US5877277-A.
XX
XX 02-MAR-1999.
XX
XX 10-NOV-1994; 94US-00337127.
XX
XX 24-SEP-1987; 87US-00100571.
XX
XX 25-MAR-1988; 86US-00173311.
XX
XX 08-JUN-1988; 86US-00204171.
XX
XX 16-JUN-1988; 88US-00207759.
XX
XX 23-SEP-1988; 88US-00248771.
XX
XX 14-OCT-1988; 88US-00257998.
XX
XX 09-DEC-1988; 88US-00282328.
XX
XX 02-MAR-1989; 89US-00317941.
XX
XX 07-JUL-1989; 89US-00376555.
XX
XX 21-AUG-1989; 89US-00397169.
XX
XX 30-MAR-1990; 90US-00502438.
XX
XX 18-OCT-1991; 91US-00779039.

XX (TULIA) TULANE EDUCATIONAL FUND.
 PA (BIOM-) BIOMEASURE INC.
 XX
 PI Kim SH, Coy DH, Moreau J;
 XX WPI; 1999-189718/16.
 DR
 PT New peptides - useful for treating benign or malignant tissue
 PT proliferation, gastrointestinal disorders and diabetes.
 XX
 PS Disclosure; Col 29-30; 22pp; English.
 XX
 CC This invention describes novel peptides which are analogues of litorin or
 CC the 10 amino acid carboxy-terminal region of mammalian gastrin releasing
 CC peptide or the 10 amino acid carboxy-terminal region of amphibian
 CC bombesin of formula (R1)(R2)A1-A2-Trip-A4-A5-A6-A7-W where A1 = D-isomer
 CC of p-x-phe, Trip or beta-Nal; X = F, Cl, Br, NO2, OH, H or Me; A2 = Gly,
 CC Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trip, Cys, beta-Nal, His, 1-
 CC methyl-His or 3-methyl-His; A4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle,
 CC alpha-aminobutyric acid, Met, p-X-Phe, Trip, Cys or beta-Nal; A5 = Gln,
 CC Asn, Gly, Ala, Leu, Ile, Nle, alpha-aminobutyric acid, Met, Val, p-X-Phe,
 CC Trip, Thr or beta-Nal; A6 = Ser, Gly or D-isomer of Ala, N-methyl-Ala,
 CC Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trip, Cys or beta-Nal; A7 = His or
 CC 1-methyl or 3-methyl-His; W = -N(R3)-CH(Z1)-R4-CH(Z2)-C(=O)V; R4 = CH2NH
 CC ; Z1, Z2 = Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Gln, p-X-Phe,
 CC Trip, Cys, Met, Pro, Hyp or cyclohexylala; V = OR5 or NR6R7; R3, R5, R6,
 CC R7 = H, lower alkyl, phenyl(lower alkyl) or naphthyl(lower alkyl); R1, R2
 CC = H, 1,2c alkyl, 7-10c phenylalkyl or COEt; where R1 and R2 are bonded to
 CC the N-terminal amino acid of the peptide; E1 = 1-20c alkyl, 3-20c
 CC alkenyl, 3-20c alkynyl, Ph, naphthyl or 7-10c phenylalkyl; provided that
 CC when 1 of R1 and R2 is COEt, the other must be H. The peptides can be
 CC used for treating benign or malignant proliferation of tissue e.g. small-
 CC cell lung carcinoma, atherosclerosis, gastrointestinal disorders, and
 CC diabetes or diabetes related retinopathy. AA92733-W2742 represent
 CC bombesin peptide analogues used in the method of the invention. (Updated
 CC on 20-MAR-2003 to correct PR field.)
 CC
 XX
 SQ Sequence 8 AA;
 Query Match 100.0%; Score 25; DB 2; Length 8;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 XQXXVXHL 8
 Db 1 EQWAVGHL 8
 RESULT 13
 AAB08307
 ID AAB08307 standard; peptide; 8 AA.
 XX
 AC AAB08307;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 DE Amino acid sequence of antiangiogenic peptide DT-23.
 XX
 KW Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
 KW VIP1; VIP2; VIP3; BOM1; bombesin; SP1; substance P; MuJ-7; tumour growth;
 KW tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
 KW leukaemia; lymphoma.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 1 /note= "D-form residue"
 FT Modified-site 4 /label= A1b
 FT Modified-site 8 /note= "alpha-aminoisobutyric acid"

FT /note= "amidated residue"
 XX
 XX WO200047221-A1.
 XX
 PD 17-AUG-2000.
 XX
 XX 11-FEB-2000; 2000WO-US003559.
 XX
 PR 11-FEB-1999; 99US-00248381.
 XX
 PA (NAIM-) NAT INST IMMUNOLOGY.
 PA (DABU-) DABUR RES FOUND.
 PA (CORD/) CORD J I.
 XX
 PI Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;
 PI Singh AT;
 XX WPI; 2000-549083/50.
 XX
 DR Novel therapeutically active composition comprising at least 5 peptides,
 XX useful for treating angiogenesis especially as a result of
 PT adenocarcinomas.
 PT
 CC Claim 18; Page 36; 42pp; English.
 PS
 XX AAB08304-15 represent peptides which have an antiangiogenic effect. The
 XX specification describes therapeutically active compositions comprising at
 XX least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
 XX least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
 XX VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
 XX receptor antagonist), BOM1 (a bombesin antagonist), and SP1 (a substance
 XX P antagonist). The combination of these 7 analogues is known as MuJ-7.
 CC MuJ-7 is used as an anticancer drug to restrict tumour growth and spread
 CC by inhibiting tumour angiogenesis. MuJ-7, in addition, inhibits
 CC metastasis through its antiangiogenic activity in all cancers. The
 CC peptides are useful for the treatment and prevention of angiogenesis,
 CC especially as a result of adenocarcinomas of the colon, breast, lung,
 CC prostate, kidney, leukemias or lymphomas
 CC
 XX
 SQ Sequence 8 AA;
 Query Match 100.0%; Score 25; DB 3; Length 8;
 Best Local Similarity 62.5%; Pred. No. 1.4e+06;
 Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 XQXXVXHL 8
 Db 1 EQWAVGHL 8
 RESULT 14
 AAB08308
 ID AAB08308 standard; peptide; 8 AA.
 XX
 AC AAB08308;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 DE Amino acid sequence of antiangiogenic peptide DT-24.
 XX
 KW Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
 KW VIP1; VIP2; VIP3; BOM1; bombesin; SP1; substance P; MuJ-7; tumour growth;
 KW tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
 KW leukaemia; lymphoma.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 1 /note= "D-form residue"
 FT Modified-site 6 /label= A1b
 FT Modified-site 6 /note= "alpha-aminoisobutyric acid"

FT Modified-site 8 /note="amidated residue"
 FT
 XX
 XX WO200047221-A1.
 XX
 XX 17-AUG-2000.
 XX
 XX 11-FEB-2000; 2000WO-US003559.
 XX
 XX 11-FEB-1999; 99US-00248381.
 XX
 XX (NAIM-) NAT INST IMMUNOLOGY.
 XX (DABU-) DABUR RES FOUND.
 XX (CORD/) CORD J I.
 XX
 PI Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;
 PI Singh AT;
 DR WPI: 2000-549083/50.
 XX
 PT Novel therapeutically active composition comprising at least 5 peptides,
 PT useful for treating angiogenesis especially as a result of
 PT adenocarcinomas.
 PS
 XX Claim 11; Page 31; 42pp; English.
 XX
 CC AAB08304-15 represent peptides which have an antiangiogenic effect. The
 CC specification describes therapeutically active compositions comprising at
 CC least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
 CC least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
 CC VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
 CC receptor antagonist), BOM1 (a bombesin antagonist), and SPI (a substance
 CC P antagonist). The combination of these 7 analogues is known as MuJ-7.
 CC MuJ-7 is used as an anticancer drug to restrict tumour growth and spread
 CC by inhibiting tumour angiogenesis. MuJ-7, in addition, inhibits
 CC metastasis through its antiangiogenic activity in all cancers. The
 CC peptides are useful for the treatment and prevention of angiogenesis,
 CC especially as a result of adenocarcinomas of the colon, breast, lung,
 CC prostate, kidney, leukemias or lymphomas
 CC
 XX
 SQ Sequence 8 AA:
 Query Match 100.0%; Score 25; DB 3; Length 8;
 Best Local Similarity 62.5%; Pred. No. 1.4e+06;
 Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 : : : : :
 Db 1 FQMAVXHL 8

RESULT 15
 AAB08302 standard; peptide; 8 AA.
 XX
 AC AAB08302;
 XX
 DT 04-DEC-2000 (first entry)
 XX
 XX Amino acid sequence of bombesin analogue BOM1.
 XX
 KW Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
 KW VIP1; VIP2; VIP3; BOM1; bombesin; SPI; substance P; MuJ-7; tumour growth;
 KW tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
 KW leukaemia; lymphoma.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH Misc-difference 1 /note="D-form residue"
 FT Modified-site 8 /note="residue is Leu-NHec"
 FT

XX
 XX WO200047221-A1.
 XX
 XX 17-AUG-2000.
 XX
 XX 11-FEB-2000; 2000WO-US003559.
 XX
 XX 11-FEB-1999; 99US-00248381.
 XX
 XX (NAIM-) NAT INST IMMUNOLOGY.
 XX (DABU-) DABUR RES FOUND.
 XX (CORD/) CORD J I.
 XX
 PI Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;
 PI Singh AT;
 DR WPI: 2000-549083/50.
 XX
 PT Novel therapeutically active composition comprising at least 5 peptides,
 PT useful for treating angiogenesis especially as a result of
 PT adenocarcinomas.
 PS
 XX Disclosure; Page 8; 42pp; English.
 XX
 CC The present sequence represents an analogue of bombesin. The
 CC specification describes therapeutically active compositions comprising at
 CC least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
 CC least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
 CC VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
 CC receptor antagonist), BOM1 (a bombesin antagonist), and SPI (a substance
 CC P antagonist). The combination of these 7 analogues is known as MuJ-7.
 CC MuJ-7 is used as an anticancer drug to restrict tumour growth and spread
 CC by inhibiting tumour angiogenesis. MuJ-7, in addition, inhibits
 CC metastasis through its antiangiogenic activity in all cancers. The
 CC peptides are useful for the treatment and prevention of angiogenesis,
 CC especially as a result of adenocarcinomas of the colon, breast, lung,
 CC prostate, kidney, leukemias or lymphomas
 CC
 XX
 SQ Sequence 8 AA:
 Query Match 100.0%; Score 25; DB 3; Length 8;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 : : : : :
 Db 1 FQMAVXHL 8

RESULT 16
 AAB91910 standard; peptide; 8 AA.
 XX
 AC AAB91910;
 XX
 DT 22-JUN-2001 (first entry)
 XX
 XX Bombesin peptide SEQ ID NO:1086.
 XX
 KW Protection; endogenous therapeutic peptide; peptidase; conjugation;
 KW blood component; modification; succinimidy; maleimido group; amino;
 KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.
 XX
 OS Synthetic.
 XX
 XX Homo sapiens.
 XX
 XX Synthetic.
 XX
 XX WO200069900-A2.
 XX
 XX 23-NOV-2000.
 XX
 XX 17-MAY-2000; 2000WO-US013576.
 XX
 XX 17-MAY-1999; 99US-0134406P.
 XX

PT New peptide or its salt that are antagonists to bombesin and bombesin
XX like peptides useful in the treatment of cancer.
PS Claim 4; Page 22; 35pp; English.
XX
CC The present invention relates to a peptide or its salt that are
CC antagonists to bombesin and bombesin-like peptide. The invention is used
CC for treatment or prevention of cancer or malignant diseases in mammals.
CC The alpha, alpha-dialkylated amino acids present in the peptide analogues
CC induces highly specific constraints in the peptide backbone. The present
CC sequence is a synthetic peptide #1 possessing antagonist properties
CC against bombesin and bombesin-like peptide
XX
SQ Sequence 8 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 8;
Best Local Similarity 87.5%; Pred. No. 1.4e+06;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 XXXVXHL 8
DB 1 XXXVXHL 8
XX
RESULT 19
AAE10468 ID AAE10468 standard; peptide; 8 AA.
XX
AC AAE10468;
XX
DT 10-DEC-2001 (first entry)
XX
DE Synthetic peptide #6 possessing antagonist properties against bombesin.
XX Bombesin; therapy; malignant disease; alpha, alpha-dialkylated amino acid;
KM cancer; cytostatic.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Misc-difference 3 /note= "D-form residue"
FT Modified-site 6 /note= "Alpha, alpha-di-n-propylglycine"
FT Modified-site 8 /note= "C-terminal amide"
XX
PN WO200162777-A1.
XX
PD 30-AUG-2001.
XX
PF 31-JUL-2000; 2000WO-US020873.
XX
PR 24-FEB-2000; 2000IN-DE000147.
XX
PA (DABU-) DABUR RES FOUND.
PA (CORD/) CORD J I.
XX
PI Burman AC, Prasad S, Mukherjee R, Jaggi M, Singh AT, Mathur A;
XX
XX WPI; 2001-582040/65.
XX
PT New peptide or its salt that are antagonists to bombesin and bombesin
PT like peptides useful in the treatment of cancer.
XX
PS Claim 7; Page 23; 35pp; English.
XX
CC The present invention relates to a peptide or its salt that are
CC antagonists to bombesin and bombesin-like peptide. The invention is used
CC for treatment or prevention of cancer or malignant diseases in mammals.
CC The alpha, alpha-dialkylated amino acids present in the peptide analogues
XX

CC induces highly specific constraints in the peptide backbone. The present
CC sequence is a synthetic peptide #1 possessing antagonist properties
CC against bombesin and bombesin-like peptide
XX
SQ Sequence 8 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 8;
Best Local Similarity 87.5%; Pred. No. 1.4e+06;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 XXXVXHL 8
DB 1 XXXVXHL 8
XX
RESULT 20
AAE10470 ID AAE10470 standard; peptide; 8 AA.
XX
AC AAE10470;
XX
DT 10-DEC-2001 (first entry)
XX
DE Synthetic peptide #8 possessing antagonist properties against bombesin.
XX Bombesin; therapy; malignant disease; alpha, alpha-dialkylated amino acid;
KM cancer; cytostatic.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 6 /note= "1-Aminocyclopentane carboxylic acid"
FT Modified-site 8 /note= "C-terminal amide"
XX
PN WO200162777-A1.
XX
PD 30-AUG-2001.
XX
PF 31-JUL-2000; 2000WO-US020873.
XX
PR 24-FEB-2000; 2000IN-DE000147.
XX
PA (DABU-) DABUR RES FOUND.
PA (CORD/) CORD J I.
XX
PI Burman AC, Prasad S, Mukherjee R, Jaggi M, Singh AT, Mathur A;
XX
XX WPI; 2001-582040/65.
XX
PT New peptide or its salt that are antagonists to bombesin and bombesin
PT like peptides useful in the treatment of cancer.
XX
PS Claim 9; Page 23; 35pp; English.
XX
CC The present invention relates to a peptide or its salt that are
CC antagonists to bombesin and bombesin-like peptide. The invention is used
CC for treatment or prevention of cancer or malignant diseases in mammals.
CC The alpha, alpha-dialkylated amino acids present in the peptide analogues
CC induces highly specific constraints in the peptide backbone. The present
CC sequence is a synthetic peptide #1 possessing antagonist properties
CC against bombesin and bombesin-like peptide
XX
SQ Sequence 8 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 8;
Best Local Similarity 75.0%; Pred. No. 1.4e+06;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
OY 1 XXXVXHL 8

Db 1 XQWAVXHL 8

RESULT 21

ID AAE10463 standard; peptide: 8 AA.

AC AAE10463;

DT 10-DEC-2001 (first entry)

DE Synthetic peptide #1 possessing antagonist properties against bombesin.

KW Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid; cancer; cytostatic.

OS Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 1 /note= "D-form residue"

FT Modified-site 6 /label= Aib

FT /note= "Alpha-aminoisobutyric acid"

FT Modified-site 8 /note= "C-terminal amide"

PN W0200162777-A1.

PD 30-AUG-2001.

PF 31-JUL-2000; 2000WO-US020873.

PR 24-FEB-2000; 2000IN-DE000147.

PA (DABU-) DABUR RES FOUND.

PA (CORD/) CORD J I.

PI Burman AC, Prasad S, Mukherjee R, Jaggi M, Singh AT, Mathur A;

XX WPI; 2001-582040/65.

PT New peptide or its salt that are antagonists to bombesin and bombesin like peptides useful in the treatment of cancer.

PS Claim 2; Page 22; 35pp; English.

CC The present invention relates to a peptide or its salt that are antagonists to bombesin and bombesin-like peptide. The invention is used for treatment or prevention of cancer or malignant diseases in mammals. The alpha,alpha-dialkylated amino acids present in the peptide analogues induces highly specific constraints in the peptide backbone. The present sequence is a synthetic peptide #1 possessing antagonist properties against bombesin and bombesin-like peptide

XX Sequence 8 AA;

Query Match 100.0%; Score 25; DB 4; Length 8;

Best Local Similarity 75.0%; Pred. No. 1.4e+06;

Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXVXHL 8

Db 1 XQWAVXHL 8

RESULT 22

ID AAE10471 standard; peptide: 8 AA.

XX AAE10471;

XX AAE10471;

DT 10-DEC-2001 (first entry)

DE Synthetic peptide #9 possessing antagonist properties against bombesin.

KW Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid; cancer; cytostatic.

OS Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 1 /note= "Butanoyl-D-form residue"

FT Modified-site 6 /label= Aib

FT /note= "Alpha-aminoisobutyric acid"

FT Modified-site 8 /note= "C-terminal amide"

PN W0200162777-A1.

PD 30-AUG-2001.

PF 31-JUL-2000; 2000WO-US020873.

PR 24-FEB-2000; 2000IN-DE000147.

PA (DABU-) DABUR RES FOUND.

PA (CORD/) CORD J I.

PI Burman AC, Prasad S, Mukherjee R, Jaggi M, Singh AT, Mathur A;

XX WPI; 2001-582040/65.

PT New peptide or its salt that are antagonists to bombesin and bombesin like peptides useful in the treatment of cancer.

PS Claim 10; Page 23; 35pp; English.

CC The present invention relates to a peptide or its salt that are antagonists to bombesin and bombesin-like peptide. The invention is used for treatment or prevention of cancer or malignant diseases in mammals. The alpha,alpha-dialkylated amino acids present in the peptide analogues induces highly specific constraints in the peptide backbone. The present sequence is a synthetic peptide #1 possessing antagonist properties against bombesin and bombesin-like peptide

XX Sequence 8 AA;

Query Match 100.0%; Score 25; DB 4; Length 8;

Best Local Similarity 75.0%; Pred. No. 1.4e+06;

Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXVXHL 8

Db 1 XQWAVXHL 8

RESULT 23

ID AAE10464 standard; peptide: 8 AA.

AC AAE10464;

DT 10-DEC-2001 (first entry)

DE Synthetic peptide #2 possessing antagonist properties against bombesin.

KW Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid; cancer; cytostatic.

OS Synthetic.

XX Key

XX Location/Qualifiers


```

FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 4 /label= Alb
FT /note= "Alpha-aminobutyric acid"
FT Modified-site 8 /note= "C-terminal amide"
PN WO200162777-A1.
XX 30-AUG-2001.
PD 31-JUL-2000; 2000WO-US020873.
XX 24-FEB-2000; 2000IN-DE000147.
XX (DABU-) DABUR RES FOUND.
XX (CORD/) CORD J I.
PI Burman AC, Prasad S, Mukherjee R, Jaggi M, Singh AT, Mathur A;
XX WPI: 2001-582040/65.
DR WPI: 2001-582040/65.
XX New peptide or its salt that are antagonists to bombesin and bombesin
PT like peptides useful in the treatment of cancer.
XX Claim 3; Page 22; 35pp; English.
XX The present invention relates to a peptide or its salt that are
CC antagonists to bombesin and bombesin-like peptide. The invention is used
CC for treatment or prevention of cancer or malignant diseases in mammals.
CC The alpha, alpha-dialkylated amino acids present in the peptide analogues
CC induces highly specific constraints in the peptide backbone. The present
CC sequence is a synthetic peptide #1 possessing antagonist properties
CC against bombesin and bombesin-like peptide
XX Sequence 8 AA:
SQ
Query Match 100.0%; Score 25; DB 4; Length 8;
Best Local Similarity 75.0%; Pred. No. 1.4e+06;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
DB 1 XQXVGH 8
RESULT 24
AAE10472
ID AAE10472 standard; peptide; 8 AA.
XX AAE10472;
AC 10-DEC-2001 (first entry)
XX 10-DEC-2001 (first entry)
XX Synthetic peptide #10 possessing antagonist properties against bombesin.
DE Bombesin; therapy; malignant disease; alpha, alpha-dialkylated amino acid;
XX cancer; cytostatic.
XX Synthetic.
XX Key Location/Qualifiers
FT Misc-difference 1 /note= "Octanoyl-D-form residue"
FT Modified-site 6 /label= Alb
FT /note= "Alpha-aminobutyric acid"
FT Modified-site 8 /note= "C-terminal amide"
XX WO200162777-A1.

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PD 30-AUG-2001.
XX 31-JUL-2000; 2000WO-US020873.
XX 24-FEB-2000; 2000IN-DE000147.
XX (DABU-) DABUR RES FOUND.
XX (CORD/) CORD J I.
PI Burman AC, Prasad S, Mukherjee R, Jaggi M, Singh AT, Mathur A;
XX WPI: 2001-582040/65.
DR WPI: 2001-582040/65.
XX New peptide or its salt that are antagonists to bombesin and bombesin
PT like peptides useful in the treatment of cancer.
XX Claim 11; Page 23; 35pp; English.
XX The present invention relates to a peptide or its salt that are
CC antagonists to bombesin and bombesin-like peptide. The invention is used
CC for treatment or prevention of cancer or malignant diseases in mammals.
CC The alpha, alpha-dialkylated amino acids present in the peptide analogues
CC induces highly specific constraints in the peptide backbone. The present
CC sequence is a synthetic peptide #1 possessing antagonist properties
CC against bombesin and bombesin-like peptide
XX Sequence 8 AA:
SQ
Query Match 100.0%; Score 25; DB 4; Length 8;
Best Local Similarity 75.0%; Pred. No. 1.4e+06;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
DB 1 XQXVGH 8
RESULT 25
ABB06687
ID ABB06687 standard; peptide; 8 AA.
XX ABB06687;
AC 10-JUN-2002 (first entry)
XX 10-JUN-2002 (first entry)
XX Bombesin/gastrin-releasing peptide related peptide #1.
DE Amphibian; bombesin; gastrin-releasing peptide; GRP; GRP, Iltosin;
XX growth hormone releasing factor; cytostatic; antiarteriosclerotic;
XX gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
XX autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
XX malignant proliferation; benign proliferation; pancreatic secretion;
XX mobility; amylase secretion suppression; appetite; muscular dystrophy;
XX diabetes.
XX Synthetic.
XX Key Location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 8 /note= "C-terminally modified with ethylamide"
XX US6307017-B1.
XX 23-OCT-2001.
XX 02-MAR-1999; 99US-00260846.
XX 24-SEP-1987; 87US-00100571.
XX 25-MAR-1988; 88US-00173111.
XX 08-JUN-1988; 88US-00204171.
XX 16-JUN-1988; 88US-00207759.

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RESULT 27
 ABB06688
 ID ABB06688 standard; peptide: 8 AA.
 XX
 AC ABB06688;
 XX
 DT 10-JUN-2002 (first entry)
 XX
 DE Bombesin/gastrin-releasing peptide related peptide #2.
 XX
 KW Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; licoen;
 KW growth hormone releasing factor; cytostatic; antiarteriosclerotic;
 KW gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
 KW autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
 KW malignant proliferation; benign proliferation; pancreatic secretion;
 KW motility; amylase secretion suppression; appetite; muscular dystrophy;
 KW diabetes.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1 /note= "Cpa; D-form residue"
 FT Modified-site 8 /note= "amidated beta leucine"
 XX
 PN US6307017-B1.
 XX
 PD 23-OCT-2001.
 XX
 PF 02-MAR-1999; 99US-00260846.
 XX
 PR 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 XX
 PA (BIOM-) BIOMEASURE INC.
 PA (TULA) TULANE EDUCATIONAL FUND.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX
 DR WPI; 2002-162970/21.
 XX
 PT New antagonistic analogs of licoen and similar peptides, are useful for
 PT treating malignant, or benign proliferation or gastrointestinal disorders.
 XX
 PS Claim 5; Col 40; 29pp; English.
 XX
 CC The present invention describes therapeutic peptides (A) or their salts
 CC of 7-10 amino acids (aa) that are analogs of the natural peptide,
 CC having C-terminal Met, licoen or the 10 aa C-terminal region of either
 CC mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
 CC cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
 CC ophthalmological activities and can be used as natural peptide
 CC antagonists. The peptide pyroglu-Gln-Trp-Ala-Val-Gly-His-Leu-serine-NH2
 CC has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
 CC cells of 150 nM and IC50 for inhibition of bombesin-stimulated
 CC incorporation of tritiated thymidine into small cell lung cancer cells
 CC (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
 CC substance related to (A) acts as autocrine or paracrine mitotic factor,
 CC e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
 CC or disorders of gastric or pancreatic secretion or motility, e.g. to
 CC suppress secretion of amylase and to control appetite (particularly

CC restoration of appetite in patients with cachexia). Antagonists of GRP
 CC also suppresses the release of growth hormone so can be used to slow down
 CC progression of muscular dystrophy and to treat diabetes (or associated
 CC retinopathy). The present sequence represents a specifically claimed
 CC example of (A) from the present invention
 XX
 SQ Sequence 8 AA;
 XX
 Qy Query Match 100.0%; Score 25; DB 5; Length 8;
 Db Best Local Similarity 62.5%; Pred. No. 1.4e+06;
 Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
 1 XQXXVXHL 8
 1 XQNAVCHL 8
 XX
 RESULT 28
 ABB06670
 ID ABB06670 standard; peptide: 8 AA.
 XX
 AC ABB06670;
 XX
 DT 10-JUN-2002 (first entry)
 XX
 DE Bombesin/gastrin-releasing peptide related peptide SEQ ID NO:9.
 XX
 KW Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; licoen;
 KW growth hormone releasing factor; cytostatic; antiarteriosclerotic;
 KW gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
 KW autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
 KW malignant proliferation; benign proliferation; pancreatic secretion;
 KW motility; amylase secretion suppression; appetite; muscular dystrophy;
 KW diabetes.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1 /note= "pyroglutamic-acid"
 FT Modified-site 8 /note= "C-terminally modified with methyl ester"
 XX
 PN US6307017-B1.
 XX
 PD 23-OCT-2001.
 XX
 PF 02-MAR-1999; 99US-00260846.
 XX
 PR 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 XX
 PA (BIOM-) BIOMEASURE INC.
 PA (TULA) TULANE EDUCATIONAL FUND.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX
 DR WPI; 2002-162970/21.
 XX
 PT New antagonistic analogs of licoen and similar peptides, are useful for
 PT treating malignant or benign proliferation or gastrointestinal disorders.
 XX

PS Disclosure; Col 29; 29pp; English.

XX The present invention describes therapeutic peptides (A) or their salts

CC of 7-10 amino acids (aa) that are analogues of the natural peptides

CC having C-terminal Met, licoen or the 10 aa C-terminal region of either

CC mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have

CC cytosolic, antiarteriosclerotic, gastrointestinal, antidiabetic and

CC opthalmological activities and can be used as natural peptide

CC antagonists. The peptide pyroglu-Gln-Trp-Ala-Val-Gly-His-Leu-seratine-NH₂

CC has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3

CC cells of 150 nM and IC50 for inhibition of bombesin-stimulated

CC incorporation of tritiated thymidine into small cell lung cancer cells

CC (NCI-H69) of 165 nM. (A) can be used to treat conditions where the

CC substance related to (A) acts as autocrine or paracrine mitotic factor,

CC e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;

CC or disorders of gastric or pancreatic secretion or motility, e.g. to

CC suppress secretion of amyase and to control appetite (particularly

CC restoration of appetite in patients with cachexia). Antagonists of GRP

CC also suppresses the release of growth hormone so can be used to slow down

CC progression of muscular dystrophy and to treat diabetes (or associated

CC retinopathy). The present sequence represents a peptide which is used in

CC the exemplification of the present invention

XX

SQ Sequence 8 AA;

Query Match 100.0%; Score 25; DB 5; Length 8;

Best Local Similarity 50.0%; Pred. No. 1.4e+06;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHL 8

Db 1 EQWAVAHL 8

RESULT 29

AB06689

ID AB06689 standard; peptide; 8 AA.

XX

AC AB06689;

XX

DT 10-JUN-2002 (first entry)

XX

DE Bombesin/gastrin-releasing peptide related peptide #3.

XX

KM Amphibian; bombesin; gastrin-releasing peptide; GRP; GRP, licoen;

KM growth hormone releasing factor; cytosolic; antiarteriosclerotic;

KM gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;

KM autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;

KM malignant proliferation; benign proliferation; pancreatic secretion;

KM motility; amyase secretion suppression; appetite; muscular dystrophy;

KM diabetes.

XX

OS Synthetic.

XX

Key Location/Qualifiers

FT Misc-difference 1

FT Modified-site 6 /note= "D-form residue"

FT Modified-site 8 /note= "N-methyl-alanine; D-form residue"

FT /note= "C-terminally modified with methyl-ester"

XX

PN US6307017-B1.

XX

PD 23-OCT-2001.

XX

XX 02-MAR-1999; 99US-00260846.

XX

XX 24-SEP-1987; 87US-00100571.

PR 25-MAR-1988; 88US-00173311.

PR 08-JUN-1988; 88US-00204171.

PR 16-JUN-1988; 88US-00207759.

PR 23-SEP-1988; 88US-00248771.

PR 14-OCT-1988; 88US-00257998.

PR 09-DEC-1988; 88US-00282328.

PR 02-MAR-1989; 89US-00317941.

PR 07-JUN-1989; 89US-00376555.

PR 21-AUG-1989; 89US-00397169.

PR 30-MAR-1990; 90US-00502438.

PR 18-OCT-1991; 91US-00779039.

PR 10-NOV-1994; 94US-00337127.

XX

PA (BIOM-) BIOMEASURE INC.

PA (TUL) TULANE EDUCATIONAL FUND.

XX

PI Coy DH, Moreau J, Kim SH;

XX

DR WPI; 2002-162970/21.

XX

FT New antagonistic analogs of licoen and similar peptides, are useful for

FT treating malignant or benign proliferation or gastrointestinal disorders.

XX

PS Claim 7; Col 40; 29pp; English.

XX

CC The present invention describes therapeutic peptides (A) or their salts

CC of 7-10 amino acids (aa) that are analogues of the natural peptides,

CC having C-terminal Met, licoen or the 10 aa C-terminal region of either

CC mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have

CC cytosolic, antiarteriosclerotic, gastrointestinal, antidiabetic and

CC opthalmological activities and can be used as natural peptide

CC antagonists. The peptide pyroglu-Gln-Trp-Ala-Val-Gly-His-Leu-seratine-NH₂

CC has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3

CC cells of 150 nM and IC50 for inhibition of bombesin-stimulated

CC incorporation of tritiated thymidine into small cell lung cancer cells

CC (NCI-H69) of 165 nM. (A) can be used to treat conditions where the

CC substance related to (A) acts as autocrine or paracrine mitotic factor,

CC e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;

CC or disorders of gastric or pancreatic secretion or motility, e.g. to

CC suppress secretion of amyase and to control appetite (particularly

CC restoration of appetite in patients with cachexia). Antagonists of GRP

CC also suppresses the release of growth hormone so can be used to slow down

CC progression of muscular dystrophy and to treat diabetes (or associated

CC retinopathy). The present sequence represents a specifically claimed

CC example of (A) from the present invention

XX

SQ Sequence 8 AA;

Query Match 100.0%; Score 25; DB 5; Length 8;

Best Local Similarity 50.0%; Pred. No. 1.4e+06;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHL 8

Db 1 EQWAVAHL 8

RESULT 30

ABP72336

ID ABP72336 standard; peptide; 8 AA.

XX

AC ABP72336;

XX

DT 08-MAY-2003 (first entry)

XX

DE Bombesin antagonist.

XX

KM Bombesin; antagonist; cancer; therapy; cytosolic.

XX

OS Synthetic.

XX

Key Location/Qualifiers

FT Modified-site 1

FT Modified-site 6 /note= "Butanoyl D-phenylalanine"

FT Modified-site 6 /label= Aib

FT /note= "2-Aminoisobutyric acid"

XX WO2003002203-A1.
 PN 09-JAN-2003.
 XX 29-JUN-2001; 2001WO-US020775.
 PD 29-JUN-2001; 2001WO-US020775.
 XX 29-JUN-2001; 2001WO-US020775.
 PR (DABU-) DABUR ONCOLOGY PLC.
 PA (CORD/) CORD J I.
 XX Burman AC, Mukherjee R, Prasad S, Jaggi M, Singh AT;
 PI WPI; 2003-255290/25.
 XX Composition for treatment of cancer comprises a combination of peptides.
 XX Claim 1; Page 8; 34pp; English.
 PS The present sequence is that of a bombesin antagonist. Bombesin is
 CC secreted by some human tumour cells and antagonists of bombesin have anti-
 CC -proliferative activity on certain cancer cells. The invention provides
 CC combinations of 2, 3 or 4 peptides selected from the present peptide, the
 CC vasoactive intestinal peptide receptor binding inhibitor given in
 CC ABP72335, the substance P antagonist given in ABP72337 and the
 CC somatostatin analogue given in ABP72338 for use in the treatment of
 CC cancer. The combination of peptides modulates multiple cellular pathways
 CC implicated in cell proliferation by altering the levels of key
 CC intracellular molecules to provide a broad spectrum of anticancer
 CC activity. The peptide compositions are used in claimed methods of killing
 CC or inhibiting the multiplication of tumour cells or cancer cells in a
 CC human or animal, for inducing caspase, downregulating intracellular
 CC levels of cAMP, inhibiting secretion of vascular endothelial growth
 CC factor, downregulating levels of mitogen activated protein kinase,
 CC upregulating intracellular levels of tyrosine phosphatase, downregulating
 CC epidermal growth factor dependent proliferation, and treating cancer
 CC especially breast, ovary, colon, lung, pancreas, prostate, stomach, oral
 CC or skin fibroblasts (all claimed), cancer associated angiogenesis and
 CC metastasis
 CC
 XX Sequence 8 AA;
 SQ
 Query Match 100.0%; Score 25; DB 6; Length 8;
 Best Local Similarity 75.0%; Pred. No. 1.4e+06;
 Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QXXXVXHL 8
 Db 1 QXMAVXHL 8
 RESULT 31
 ID ABU08880 standard; peptide; 8 AA.
 AC ABU08880;
 XX 18-SEP-2003 (first entry)
 DE Antiangiogenic MuJ-7 synthetic peptide, DT-24.
 XX Angiogenesis; MuJ-7; anticancer; tumour; vasoactive intestinal peptide;
 KW VIP; somatostatin; SOM; substance P; SP; bombesin; BOM; human;
 KW cell proliferation; autocrine; antagonist; receptor binding inhibitor;
 KW endothelial cell; cancer; hypersecretion; adenocarcinoma; colon; breast;
 KW lung; prostate; kidney; leukaemia; lymphoma; cytostatic.
 XX Synthetic.
 OS Key Location/Qualifiers
 FH Misc-difference 1
 FT "note= "D-form residue"

FT Modified-site 6
 FT /label= Atb
 FT "note= '2-amino-isobutyric acid"
 XX US6492330-B1.
 XX 10-DEC-2002.
 XX 11-FEB-1999; 99US-00248381.
 XX 16-AUG-1996; 96IN-DE001822.
 XX 08-OCT-1996; 96US-00727679.
 XX 11-FEB-1998; 98IN-DE000342.
 XX 02-APR-1998; 98US-0080433P.
 XX (NATM-) NAT INST IMMUNOLOGY.
 PA (DABU-) DABUR RES FOUND.
 XX Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;
 PI Singh AT;
 XX WPI; 2003-531016/50.
 DR An isolated peptide having specific sequence, useful for treating and/or
 CC preventing angiogenesis, or for inhibiting the proliferation or migration
 CC of tumor or cancer cells.
 CC Claim 1; Col 31; 22pp; English.
 PS The invention discloses an isolated peptide having a specific sequence,
 CC which can be used for treating and/or preventing angiogenesis. Also
 CC disclosed is the use of a combination of a peptides, termed MuJ-7, as an
 CC anticancer drug in restricting tumour growth by inhibiting tumour
 CC angiogenesis. Vasoactive intestinal peptide (VIP), Somatostatin (SOM),
 CC Substance P (SP) and Bombesin (BOM) are all secreted by at least some
 CC human tumour and cancer cells and there are binding sites for these
 CC peptides on these cells. It may be that they aid cell proliferation
 CC through an autocrine mechanism. Antagonists to these peptides (e.g. a
 CC somatostatin analog, a VIP antagonist, a VIP receptor binding inhibitor,
 CC a VIP receptor antagonist, a bombesin antagonist and a substance P
 CC antagonist), or a combination comprises an amount of each peptide, may be
 CC effective to inhibit the proliferation of endothelial cells, tumour or
 CC cancer cells, to inhibit migration of tumour or cancer cells or to
 CC modulate the hypersecretion of VIP, SOM, BOM or SP. The tumour or cancer
 CC cells are adenocarcinomas of the colon, breast, lung, prostate or kidney,
 CC or leukaemia or lymphoma. The sequence presented is the antiangiogenic
 CC MuJ-7 synthetic peptide, DT-24
 CC
 XX Sequence 8 AA;
 SQ
 Query Match 100.0%; Score 25; DB 7; Length 8;
 Best Local Similarity 62.5%; Pred. No. 1.4e+06;
 Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QXXXVXHL 8
 Db 1 QXMAVXHL 8
 RESULT 32
 ID ABU08879 standard; peptide; 8 AA.
 AC ABU08879;
 XX 18-SEP-2003 (first entry)
 DE Antiangiogenic MuJ-7 synthetic peptide, DT-23.
 XX Angiogenesis; MuJ-7; anticancer; tumour; vasoactive intestinal peptide;
 KW VIP; somatostatin; SOM; substance P; SP; bombesin; BOM; human;
 KW cell proliferation; autocrine; antagonist; receptor binding inhibitor;
 KW endothelial cell; cancer; hypersecretion; adenocarcinoma; colon; breast;

```

KW lung; prostate; kidney; leukaemia; lymphoma; cytostatic.
XX Synthetic.
XX Key Location/Qualifiers
FH Misc-difference 1 /note= "D-form residue"
FT Modified-site 4 /label= Alb
FT /note= "2-amino-isobutyric acid"
XX
XX US6492330-B1.
XX
XX 10-DEC-2002.
XX
XX 11-FEB-1999; 99US-00248381.
XX
XX 16-AUG-1996; 96IN-DE001822.
XX 08-OCT-1996; 96US-00727679.
XX 11-FEB-1998; 98IN-DE000342.
XX 02-APR-1998; 98US-0080433P.
XX
XX (NAIM-) NAT INST IMMUNOLOGY.
XX (DABU-) DABUR RES FOUND.
XX
XX Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;
XX Singh AT;
XX WPI; 2003-531016/50.
XX
XX An isolated peptide having specific sequence, useful for treating and/or
XX preventing angiogenesis, or for inhibiting the proliferation or migration
XX of tumor or cancer cells.
XX
XX Claim 1; Col 31; 22pp; English.
XX
XX The invention discloses an isolated peptide having a specific sequence,
XX which can be used for treating and/or preventing angiogenesis. Also
XX disclosed is the use of a combination of a peptides, termed Mu-7, as an
XX anticancer drug in restricting tumour growth by inhibiting tumour
XX angiogenesis. Vasoactive intestinal peptide (VIP), Somatostatin (SOM),
XX Substance P (SP) and Bombesin (BOM) are all secreted by at least some
XX human tumour and cancer cells and there are binding sites for these
XX peptides on these cells. It may be that they aid cell proliferation
XX through an autocrine mechanism. Antagonists to these peptides (e.g. a
XX somatostatin analog, a VIP antagonist, a VIP receptor binding inhibitor,
XX a VIP receptor antagonist, a bombesin antagonist and a substance P
XX antagonist), or a combination comprises an amount of each peptide, may be
XX effective to inhibit the proliferation of endothelial cells, tumour or
XX cancer cells, to inhibit migration of tumour or cancer cells or to
XX modulate the hypersecretion of VIP, SOM, BOM or SP. The tumour or cancer
XX cells are adenocarcinomas of the colon, breast, lung, prostate or kidney,
XX or leukaemia or lymphoma. The sequence presented is the antiangiogenic
XX Mu-7 synthetic peptide, DT-23
XX
XX Sequence 8 AA:
XX
XX Query Match 100.0%; Score 25; DB 7; Length 8;
XX Best Local Similarity 62.5%; Pred. No. 1.4e+06;
XX Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

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XX Bombesin/GRP-derived peptide #22.
XX
XX gastrointestinal disorder; diabetes; malignant proliferation; GRP;
XX benign proliferation; bombesin; gastrin-releasing peptide; GRP;
XX growth hormone releasing factor; GRP; litorin; neuromedin C; cancer;
XX small cell lung carcinoma; motility disorder;
XX exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
XX paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH Modified-site 1 /note= "D-form F5 Phe"
FT Modified-site 6
FT Modified-site 6 /note= "N-methyl-D-form Alanine"
FT Modified-site 8 /note= "Leu is Leu-methyl ester"
XX
XX US2003050436-A1.
XX
XX 13-MAR-2003.
XX
XX 23-OCT-2001; 2001US-00004530.
XX
XX 24-SEP-1987; 87US-00100571.
XX 25-MAR-1988; 88US-00173311.
XX 08-JUN-1988; 88US-00204171.
XX 16-JUN-1988; 88US-00207759.
XX 23-SEP-1988; 88US-00248771.
XX 14-OCT-1988; 88US-00257998.
XX 09-DEC-1988; 88US-00282328.
XX 02-MAR-1989; 89US-00317941.
XX 07-JUL-1989; 89US-00376555.
XX 21-AUG-1989; 89US-00397169.
XX 30-MAR-1990; 90US-00502438.
XX 18-OCT-1991; 91US-00779039.
XX 10-NOV-1991; 94US-00337127.
XX 02-MAR-1999; 99US-00260846.
XX
XX (BIOM-) BIOMEASURE INC.
XX
XX Coy DH, Moreau J, Kim SH;
XX WPI; 2003-810756/76.
XX
XX New therapeutic peptide used for treating e.g. gastrointestinal
XX disorders, atherosclerosis, cancer, diabetes related retinopathy and
XX diabetes.
XX
XX Disclosure; Page 4; 23pp; English.
XX
XX The invention relates to a new therapeutic peptide comprises 7-10 amino
XX acid residues. The peptide is an analogue of naturally occurring peptides
XX terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
XX gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
XX growth hormone releasing factor (GRF), litorin and neuromedin C) of
XX formula detailed in the specification. The peptides are used for treating
XX cancer e.g. small cell lung carcinoma, motility disorders of the
XX gastrointestinal tract and symptomatic relief and/or treatment of
XX exocrine pancreatic carcinoma and for restoration of appetite in cachexia
XX patients, as autocrine or paracrine mitotic agent, and for treating
XX benign and malignant proliferation of tissue, gastrointestinal disorders,
XX atherosclerosis and diabetes and diabetic retinopathy. The present
XX sequence is a peptide of the invention.
XX
XX Sequence 8 AA:
XX
XX Query Match 100.0%; Score 25; DB 7; Length 8;
XX Best Local Similarity 50.0%; Pred. No. 1.4e+06;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 XQXXVXHL 8
 Db 1 FQMAVAHL 8

RESULT 34
 ADD70038
 ID ADD70038 standard; peptide; 8 AA.
 AC ADD70038;
 XX
 DT 15-JAN-2004 (first entry)
 DE Bombesin/GRP-derived peptide #21.
 XX
 KW gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KW growth hormone releasing factor; GRF; Iltorin; neuromedin C; cancer;
 KW small cell lung carcinoma; motility disorder;
 KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 1 /note= "D-form residue"
 FT Modified-site 6 /note= "N-methyl-D-form Alanine"
 FT Modified-site 8 /note= "Leu is Leu-methyl-ester"
 FT
 XX
 PN US2003050436-A1.
 XX
 XX 13-MAR-2003.
 PD
 XX
 PF 23-OCT-2001; 2001US-00004530.
 XX
 XX 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMEASURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX
 DR WPI; 2003-810756/76.
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Claim 7; Page 4; 23pp; English.
 XX
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), Iltorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of

CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 8 AA;
 Query Match 100.0%; Score 25; DB 7; Length 8;
 Best local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 Db 1 FQMAVAHL 8

RESULT 35
 ADD70033
 ID ADD70033 standard; peptide; 8 AA.
 AC ADD70033;
 XX
 DT 29-JAN-2004 (first entry)
 DE Bombesin/GRP-derived peptide #20.
 XX
 KW gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KW growth hormone releasing factor; GRF; Iltorin; neuromedin C; cancer;
 KW small cell lung carcinoma; motility disorder;
 KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1 /note= "D-form Cpa (not defined)"
 FT Modified-site 8 /note= "Amidated Beta-Leu"
 FT
 XX
 PN US2003050436-A1.
 XX
 XX 13-MAR-2003.
 PD
 XX
 PF 23-OCT-2001; 2001US-00004530.
 XX
 XX 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMEASURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX
 DR WPI; 2003-810756/76.
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.

PS Disclosure; Page 12; 23pp; English.
XX
CC The invention relates to a new therapeutic peptide comprises 7-10 amino
CC acid residues. The peptide is an analogue of naturally occurring peptides
CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC formula detailed in the specification. The peptides are used for treating
CC cancer e.g. small cell lung carcinoma, motility disorders of the
CC gastrointestinal tract and symptomatic relief and/or treatment of
CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC patients, as autocrine or paracrine mitotic agent, and for treating
CC benign and malignant proliferation of tissue, gastrointestinal disorders,
CC atherosclerosis and diabetes and diabetic retinopathy. The present
CC sequence is a peptide of the invention.
XX
SQ Sequence 8 AA;
Query Match 100.0%; Score 25; DB 7; Length 8;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
Oy 1 XQXXVXHL 8
Db 1 XQWAVVHL 8
RESULT 36
ADD70007 standard; peptide; 8 AA.
XX ADD70007;
XX
DT 29-JAN-2004 (first entry)
XX
DE Bombesin/GRP-derived peptide #5.
XX
KM gastrointestinal disorder; diabetes; malignant proliferation;
KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KM small cell lung carcinoma; motility disorder;
KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1 /note= "D-form Cpa (not defined)"
FT Misc-difference 6 /note= "D-form residue"
FT Modified-site 8 /note= "Amidated Beta-leu"
XX
XX US2003050436-A1.
XX
PD 13-MAR-2003.
XX
PR 23-OCT-2001; 2001US-00004530.
XX
XX 24-SEP-1987; 87US-00100571.
XX 25-MAR-1988; 88US-00173311.
XX 08-JUN-1988; 88US-00204171.
XX 16-JUN-1988; 88US-00207759.
XX 23-SEP-1988; 88US-00248771.
XX 14-OCT-1988; 88US-00257998.
XX 09-DEC-1988; 88US-00282328.
XX 02-MAR-1989; 89US-00317941.
XX 07-JUL-1989; 89US-00376555.
XX 21-AUG-1989; 89US-00397169.
XX 30-MAR-1990; 90US-00502438.
XX 18-OCT-1991; 91US-00779039.
XX 10-NOV-1994; 94US-00337127.

PR 02-MAR-1999; 99US-00260846.
XX
XX (BIOM-) BIOMEASURE INC.
XX
XX Coy DH, Moreau J, Kim SH;
XX WPI; 2003-810756/76.
XX
XX New therapeutic peptide used for treating e.g. gastrointestinal
XX disorder, atherosclerosis, cancer, diabetes related retinopathy and
XX diabetes.
XX
XX Claim 8; Page 4; 23pp; English.
XX
XX The invention relates to a new therapeutic peptide comprises 7-10 amino
XX acid residues. The peptide is an analogue of naturally occurring peptides
XX terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
XX gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
XX growth hormone releasing factor (GRF), litorin and neuromedin C) of
XX formula detailed in the specification. The peptides are used for treating
XX cancer e.g. small cell lung carcinoma, motility disorders of the
XX gastrointestinal tract and symptomatic relief and/or treatment of
XX exocrine pancreatic carcinoma and for restoration of appetite in cachexia
XX patients, as autocrine or paracrine mitotic agent, and for treating
XX benign and malignant proliferation of tissue, gastrointestinal disorders,
XX atherosclerosis and diabetes and diabetic retinopathy. The present
XX sequence is a peptide of the invention.
XX
SQ Sequence 8 AA;
Query Match 100.0%; Score 25; DB 7; Length 8;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
Oy 1 XQXXVXHL 8
Db 1 XQWAVVHL 8
RESULT 37
ADD70003 standard; peptide; 8 AA.
XX ADD70003;
XX
DT 29-JAN-2004 (first entry)
XX
DE Bombesin/GRP-derived peptide #1.
XX
KM gastrointestinal disorder; diabetes; malignant proliferation;
KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KM small cell lung carcinoma; motility disorder;
KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 7 /note= "Leu is covalently linked to a ethylamide moiety"
XX
XX US2003050436-A1.
XX
PD 13-MAR-2003.
XX
PR 23-OCT-2001; 2001US-00004530.
XX
XX 24-SEP-1987; 87US-00100571.
XX 25-MAR-1988; 88US-00173311.
XX 08-JUN-1988; 88US-00204171.

PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMEASURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX
 DR WPI: 2003-810756/76.
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Claim 3; Page 4; 23pp; English.
 XX
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 8 AA;
 QY 1 QXXXVXHL 8
 Db 1 FQMAVGH 8
 100.0%; Score 25; DB 7; Length 8;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 RESULT 38
 ADD70014 standard; peptide; 8 AA.
 AC ADD70014;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Bombesin/ litorin/GRP-derived peptide #8.
 XX
 KW gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KW growth hormone releasing factor; GRP; litorin; neuromedin C; cancer;
 KW small cell lung carcinoma; motility disorder;
 KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1
 FT Modified-site /note= "N-Acetyl D-form Phenyl"
 FT Modified-site 8
 FT /note= "Amidated"

XX US2003050436-A1.
 PN 13-MAR-2003.
 XX
 PD 23-OCT-2001; 2001US-00004530.
 XX
 PP 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMEASURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX
 DR WPI: 2003-810756/76.
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Disclosure; Page 5; 23pp; English.
 XX
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 8 AA;
 QY 1 QXXXVXHL 8
 Db 1 FQMAVGH 8
 100.0%; Score 25; DB 7; Length 8;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 RESULT 39
 ADD70031 standard; peptide; 8 AA.
 AC ADD70031;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Bombesin/GRP-derived peptide #18.
 XX
 KW gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KW growth hormone releasing factor; GRP; litorin; neuromedin C; cancer;
 KW small cell lung carcinoma; motility disorder;

KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 XX Synthetic.
 OS
 FH Key Location/Qualifiers
 FT Misc-difference 1 /note= "D-form residue"
 FT Modified-site 8 /note= "Amidated"
 FT
 XX US2003050436-A1.
 XX
 XX 13-MAR-2003.
 XX
 XX 23-OCT-2001; 2001US-00004530.
 XX
 XX 24-SEP-1987; 87US-00100571.
 XX 25-MAR-1988; 88US-00173311.
 XX 08-JUN-1988; 88US-00204171.
 XX 16-JUN-1988; 88US-00207759.
 XX 23-SEP-1988; 88US-00248771.
 XX 14-OCT-1988; 88US-00257998.
 XX 09-DEC-1988; 88US-00282328.
 XX 02-MAR-1989; 89US-00317941.
 XX 07-JUL-1989; 89US-00376555.
 XX 21-AUG-1989; 89US-00397169.
 XX 30-MAR-1990; 90US-00502438.
 XX 18-OCT-1991; 91US-00779039.
 XX 10-NOV-1994; 94US-00337127.
 XX 02-MAR-1999; 99US-00260846.
 XX
 XX (BIOM-) BIOMEASURE INC.
 XX
 XX PI Coy DH, Moreau J, Kim SH;
 XX
 XX WPI; 2003-810756/76.
 XX
 XX New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 XX Disclosure; Page 12; 23pp; English.
 XX
 XX The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 XX Sequence 8 AA:
 SQ
 Query Match 100.0%; Score 25; DB 7; Length 8;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 OY 1 XXXVXHL 8
 Db 1 FQWAVGHL 8
 RESULT 40
 ADD70017
 ID ADD70017 standard; peptide; 8 AA.
 XX

AC ADD70017;
 XX
 XX 29-JAN-2004 (first entry)
 XX
 XX Bombesin/ litorin/GRP-derived peptide #11.
 XX
 XX gastrointestinal disorder; diabetes; malignant proliferation;
 KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
 KM small cell lung carcinoma; motility disorder;
 KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 XX
 XX Synthetic.
 XX
 XX Key Location/Qualifiers
 FT Modified-site 1 /note= "D-F5-Phe"
 FT Misc-difference 6 /note= "D-form residue"
 FT Modified-site 8 /note= "Leu-methyl ester"
 FT
 XX US2003050436-A1.
 XX
 XX 13-MAR-2003.
 XX
 XX 23-OCT-2001; 2001US-00004530.
 XX
 XX 24-SEP-1987; 87US-00100571.
 XX 25-MAR-1988; 88US-00173311.
 XX 08-JUN-1988; 88US-00204171.
 XX 16-JUN-1988; 88US-00207759.
 XX 23-SEP-1988; 88US-00248771.
 XX 14-OCT-1988; 88US-00257998.
 XX 09-DEC-1988; 88US-00282328.
 XX 02-MAR-1989; 89US-00317941.
 XX 07-JUL-1989; 89US-00376555.
 XX 21-AUG-1989; 89US-00397169.
 XX 30-MAR-1990; 90US-00502438.
 XX 18-OCT-1991; 91US-00779039.
 XX 10-NOV-1994; 94US-00337127.
 XX 02-MAR-1999; 99US-00260846.
 XX
 XX (BIOM-) BIOMEASURE INC.
 XX
 XX PI Coy DH, Moreau J, Kim SH;
 XX
 XX WPI; 2003-810756/76.
 XX
 XX New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 XX Disclosure; Page 6; 23pp; English.
 XX
 XX The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 XX Sequence 8 AA:
 SQ
 Query Match 100.0%; Score 25; DB 7; Length 8;
 XX

Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
: : : : :
Db 1 FQWAVVHL 8

RESULT 41

ADD70018
ID ADD70018 standard; peptide; 8 AA.

AC ADD70018;

DT 29-JAN-2004 (first entry)

DE Bombesin/ litorin/GRP-derived peptide #12.

KM gastrointestinal disorder; diabetes; malignant proliferation;

KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;

KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;

KM small cell lung carcinoma; motility disorder;

KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;

KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.

OS Synthetic.

FT Key

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

CC formula detailed in the specification. The peptides are used for treating
CC cancer e.g. small cell lung carcinoma, motility disorders of the
CC gastrointestinal tract and symptomatic relief and/or treatment of
CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC patients, as autocrine or paracrine mitotic agent, and for treating
CC benign and malignant proliferation of tissue, gastrointestinal disorders,
CC atherosclerosis and diabetes and diabetic retinopathy. The present
CC sequence is a peptide of the invention.

SQ Sequence 8 AA;

Query Match 100.0%; Score 25; DB 7; Length 8;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
: : : : :
Db 1 FQWAVVHL 8

RESULT 42

ADD70006
ID ADD70006 standard; peptide; 8 AA.

AC ADD70006;

DT 29-JAN-2004 (first entry)

DE Bombesin/GRP-derived peptide #4.

KM gastrointestinal disorder; diabetes; malignant proliferation;

KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;

KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;

KM small cell lung carcinoma; motility disorder;

KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;

KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.

OS Synthetic.

FT Key

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

FT Modified-site

New therapeutic peptide used for treating e.g. gastrointestinal

PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Claim 5; Page 4; 23pp; English.
 XX
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 8 AA;
 Query Match 100.0%; Score 25; DB 7; Length 8;
 Best Local Similarity 62.5%; Pred. No. 1.4e+06; Indels 0; Gaps 0;
 Matches 5; Conservative 3; Mismatches 0;
 QY 1 QXXXVXHL 8
 ||:::||
 1 QXMAVGH 8
 Db
 RESULT 43
 ADD70013
 ID ADD70013 standard; peptide; 8 AA.
 XX
 AC ADD70013;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Bombesin/ litorin/GRP-derived peptide #7.
 XX
 KW gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KW growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
 KW small cell lung carcinoma; motility disorder;
 KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 KM
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1
 FT Modified-site /note= "D-form Naphthylalanine"
 FT Modified-site 8
 FT /note= "Amidated"
 FT
 XX
 PN US2003050436-A1.
 PD
 XX
 PD 13-MAR-2003.
 PD
 PF 23-OCT-2001; 2001US-00004530.
 XX
 XX 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502458.
 PR 18-OCT-1991; 91US-00779039.

PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMEASURE INC.
 XX
 FI Coy DH, Moreau J, Kim SH;
 XX
 XX WPI; 2003-810756/76.
 DR
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Disclosure; Page 5; 23pp; English.
 XX
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 8 AA;
 Query Match 100.0%; Score 25; DB 7; Length 8;
 Best Local Similarity 62.5%; Pred. No. 1.4e+06; Indels 0; Gaps 0;
 Matches 5; Conservative 3; Mismatches 0;
 QY 1 QXXXVXHL 8
 ||:::||
 1 QXMAVGH 8
 Db
 RESULT 44
 ADD70015
 ID ADD70015 standard; peptide; 8 AA.
 XX
 AC ADD70015;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Bombesin/ litorin/GRP-derived peptide #9.
 XX
 KW gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KW growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
 KW small cell lung carcinoma; motility disorder;
 KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 KM
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 1
 FT Modified-site /note= "D-form residue"
 FT Modified-site 6
 FT Modified-site /note= "N-Me-D-Ala"
 FT Modified-site 7
 FT Modified-site /note= "His (Tos)"
 FT Modified-site 8
 FT /note= "Leu-O-resin"
 FT
 XX
 PN US2003050436-A1.
 PD
 XX
 PD 13-MAR-2003.
 PD
 PF 13-MAR-2003.
 XX

PF 23-OCT-2001; 2001US-00004530.
 XX
 PR 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMESURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX WPI; 2003-810756/76.
 DR
 XX
 XX New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Disclosure; Page 5; 23pp; English.
 XX
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 8 AA;
 QY
 Best Local Similarity 100.0%; Score 25; DB 7; Length 8;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Db 1 QXXXVXHL 8
 1 FQMAVGH 8
 DB
 RESULT 45
 ADD70012 standard; peptide; 8 AA.
 XX
 AC ADD70012;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Bombesin/ litorin/GRP-derived peptide #6.
 XX
 KM gastrointestinal disorder; diabetes; malignant proliferation;
 KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
 KM small cell lung carcinoma; motility disorder;
 KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 XX
 OS Synthetic.
 XX

FH Key Location/Qualifiers
 FT Misc-difference 1
 FT Modified-site 8 /note= "Amidated"
 FT
 FT
 XX US2003050436-A1.
 XX
 PD 13-MAR-2003.
 XX
 XX 23-OCT-2001; 2001US-00004530.
 PF
 XX
 XX 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMESURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX WPI; 2003-810756/76.
 DR
 XX
 XX New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Disclosure; Page 5; 23pp; English.
 XX
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 8 AA;
 QY
 Best Local Similarity 100.0%; Score 25; DB 7; Length 8;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Db 1 QXXXVXHL 8
 1 FQMAVGH 8
 DB
 RESULT 46
 AAR09335 standard; peptide; 9 AA.
 XX
 AC AAR09335;
 XX
 DT 25-MAR-2003 (revised)
 DT 31-OCT-2002 (revised)
 DT 30-MAR-1992 (first entry)
 XX

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XX DE Sequence of Bombesin receptor peptide ligand with irreversible effects.
XX KM Bombesin receptor; agonist; antagonist.
XX OS Synthetic.
XX FH Key
XX FT Modified-site 1
FT /label= H-pMe1
FT /note= "pMe1= p-bis (2-chloroethyl) amino-L-phenylalanine"
FT Modified-site 9
FT /label= Met-NH2
XX PN WO9001037-A.
XX PD 08-FEB-1990.
XX PF 19-JUL-1989; 89WO-EP000842.
XX PR 21-JUL-1988; 88GB-00017379.
PR 28-MAR-1989; 89GB-00006300.
XX PA (FARM ) FARMITALIA ERBA SPA CARLO.
XX PI Castiglioni R, Galantini M, Corradi F, Gozzini L, Ciomei M;
PI Molinari I;
XX DR WPI; 1990-067161/09.
XX PT Bombesin receptor peptide ligands with irreversible effects - as agonists
PT and antagonists both weak and strong.
XX PS Claim 2; Page 26; 32pp; English.
XX CC The inventors claim 36 peptides. Also claimed are: (a) pharmaceutical
CC prepn. of a peptide of the invention; (b) prepn. of the peptides.
CC (Updated on 31-OCT-2002 to add missing OS field.) (Updated on 25-MAR-2003
CC to correct PA field.)
XX SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXXVXHL 8
   :|::|:|
   1 QQWAVVHL 8

Db

RESULT 47
AAR04527
ID AAR04527 standard; protein; 9 AA.
XX
AC AAR04527;
XX
DT 25-MAR-2003 (revised)
DT 24-SEP-1990 (first entry)
XX
DE Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KM Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KM therapeutic peptides.
XX
OS Synthetic.
XX
FH Key
FH Modified-site 1
FT /label= D-beta-naphthylalanine
FT Modified-site 8
FT /label= leucine psi[CH2NH]

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XX PN WO9003980-A.
XX PD 19-APR-1990.
XX PF 14-OCT-1988; 88US-00257998.
XX PR 14-OCT-1988; 88US-00257998.
PR 09-DEC-1988; 88US-00282328.
PR 02-MAR-1989; 89US-00317941.
PR 07-JUL-1989; 89US-00376555.
PR 21-AUG-1989; 89US-00397169.
XX PA (TULIA ) TULANE EDUCATIONAL FUND.
PA (BIOM-) BIOMEASURE INC.
XX PI Coy DH, Moreau JP, Taylor JE, Kim SH;
XX WPI; 1990-147822/19.
XX DR WPI; 1990-147822/19.
XX PT New non-cyclic analogues of mammalian gastrin-releasing peptide - and
PT amphibian bombesin, used for cancer treatment, e.g. small cell lung
PT carcinoma, atherosclerosis and gastrointestinal disorders.
XX PS Claim 12; Page 52; 68pp; English.
XX CC C-terminal = NH2. The peptide has an active site and a binding site for
CC binding to a target cell receptor, and has one of the following
CC modifications: (a) a deletion of a residue within the active site and a
CC modification of a residue outside of the active site; and (b) a
CC replacement of 1 or 2 residues within the active site with a synthetic
CC amino acid. On binding to its receptor, the analogue acts as a
CC competitive inhibitor of the naturally occurring peptide but due to the
CC modifications, fails to exhibit the normal in vivo biological activity.
CC The peptides are useful for the treatment of benign or malignant
CC proliferation of tissues, eg cancers of the gastrointestinal tract,
CC pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
CC treatment of atherosclerosis; and disorders of the gastrointestinal
CC tissues. This peptide is a claimed example of a highly generic formula.
CC See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
CC (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
CC correct PI field.)
XX SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXXVXHL 8
   :|::|:|
   1 AQWAVVHL 8

Db

RESULT 48
AAR04530
ID AAR04530 standard; protein; 9 AA.
XX
AC AAR04530;
XX
DT 25-MAR-2003 (revised)
DT 24-SEP-1990 (first entry)
XX
DE Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KM Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KM therapeutic peptides.
XX
OS Synthetic.
XX
FH Key
FH Modified-site 1
FT /label= D-phenylalanine
FT Modified-site 1
FT /label= D-phenylalanine

```

XX XX WO9003980-A.
 XX XX 19-APR-1990.
 XX XX 14-OCT-1988; 88US-00257998.
 XX XX 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 88US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 XX XX (TULANE EDUCATIONAL FUND.
 PA (BIOM-) BIOMEASURE INC.
 XX XX Coy DH, Moreau JP, Taylor JE, Kim SH;
 PI WPI; 1990-147822/19.
 DR WPI; 1990-147822/19.
 XX New non-cyclic analogues of mammalian gastrin-releasing peptide - and
 PT amphibian bombesin, used for cancer treatment, e.g. small cell lung
 FT carcinoma, atherosclerosis and gastrointestinal disorders.
 PS Claim 17; Page 53; 68pp; English.
 XX C-terminal = methyllester. The peptide has an active site and a binding
 CC site for binding to a target cell receptor, and has one of the following
 CC modifications: (a) a deletion of a residue within the active site and a
 CC modification of a residue outside of the active site; and (b) a
 CC replacement of 1 or 2 residues within the active site with a synthetic
 CC amino acid. On binding to its receptor, the analogue acts as a
 CC competitive inhibitor of the naturally occurring peptide but due to the
 CC modifications, fails to exhibit the normal in vivo biological activity.
 CC The peptides are useful for the treatment of benign or malignant
 CC proliferation of tissues, eg cancers of the gastrointestinal tract,
 CC pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
 CC treatment of atherosclerosis; and disorders of the gastrointestinal
 CC tissues. This is a claimed example of a highly generic formula. See also
 CC AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.) (Updated
 CC on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to correct
 CC PI field.)
 XX Sequence 9 AA:
 SQ Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 DB 1 FQMAVGH 8
 RESULT 49
 AAR04526
 ID AAR04526 standard; protein; 9 AA.
 XX AAR04526;
 AC 25-MAR-2003 (revised)
 DT 24-SEP-1990 (first entry)
 XX Non-cyclic analogue of amphibian bombesin and mammalian GRP.
 DE Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
 KW therapeutic peptides.
 XX Synthetic.
 OS Key Location/Qualifiers
 XX Modified-site 1
 FT /label= OTHER

FT FT /note= "D-P-C1"
 FT Modified-site 8
 FT /label= beta-homoleucine
 XX XX WO9003980-A.
 XX XX 19-APR-1990.
 XX XX 14-OCT-1988; 88US-00257998.
 XX XX 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 88US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 XX XX (TULANE EDUCATIONAL FUND.
 PA (BIOM-) BIOMEASURE INC.
 XX XX Coy DH, Moreau JP, Taylor JE, Kim SH;
 PI WPI; 1990-147822/19.
 DR WPI; 1990-147822/19.
 XX New non-cyclic analogues of mammalian gastrin-releasing peptide - and
 PT amphibian bombesin, used for cancer treatment, e.g. small cell lung
 FT carcinoma, atherosclerosis and gastrointestinal disorders.
 PS Claim 8; Page 49; 68pp; English.
 XX C-terminal = NH2. The peptide has an active site and a binding site for
 CC binding to a target cell receptor, and has one of the following
 CC modifications: (a) a deletion of a residue within the active site and a
 CC modification of a residue outside of the active site; and (b) a
 CC replacement of 1 or 2 residues within the active site with a synthetic
 CC amino acid. On binding to its receptor, the analogue acts as a
 CC competitive inhibitor of the naturally occurring peptide but due to the
 CC modifications, fails to exhibit the normal in vivo biological activity.
 CC The peptides are useful for the treatment of benign or malignant
 CC proliferation of tissues, eg cancers of the gastrointestinal tract,
 CC pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
 CC treatment of atherosclerosis; and disorders of the gastrointestinal
 CC tissues. This peptide is a claimed example of a highly generic formula.
 CC See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
 CC (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
 CC correct PI field.)
 XX Sequence 9 AA:
 SQ Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 DB 2 FQMAVGH 9
 RESULT 50
 AAR04528
 ID AAR04528 standard; protein; 9 AA.
 XX AAR04528;
 AC 25-MAR-2003 (revised)
 DT 24-SEP-1990 (first entry)
 XX Non-cyclic analogue of amphibian bombesin and mammalian GRP.
 DE Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
 KW therapeutic peptides.
 XX Synthetic.

FN Key Location/Qualifiers
FT Modified-site 1
FT Modified-site /label= D-beta-naphthylalanine
FT Modified-site 8
FT Modified-site /label= leucine psi (CH2NH)
XX
XX W09003980-A.
XX
XX 19-APR-1990.
XX
XX 14-OCT-1988; 88US-00257998.
XX
XX 14-OCT-1988; 88US-00257998.
XX 09-DEC-1988; 88US-00282328.
XX 02-MAR-1989; 89US-00317941.
XX 07-JUL-1989; 89US-00376555.
XX 21-AUG-1989; 89US-00397169.
XX
XX (TULA) TULANE EDUCATIONAL FUND.
XX (BIOM-) BIOMEASURE INC.
XX Coy DH, Moreau JP, Taylor JE, Kim SH;
XX WPI; 1990-147822/19.
XX
XX New non-cyclic analogues of mammalian gastrin-releasing peptide - and
XX amphibian bombesin, used for cancer treatment, e.g. small cell lung
XX carcinoma, atherosclerosis and gastrointestinal disorders.
XX
XX Claim 13; Page 52; 68pp; English.
XX
XX C-terminal = NH2. The peptide has an active site and a binding site for
XX binding to a target cell receptor, and has one of the following
XX modifications: (a) a deletion of a residue within the active site and a
XX modification of a residue outside of the active site; and (b) a
XX replacement of 1 or 2 residues within the active site with a synthetic
XX amino acid. On binding to its receptor, the analogue acts as a
XX competitive inhibitor of the naturally occurring peptide but due to the
XX modifications, fails to exhibit the normal in vivo biological activity.
XX The peptides are useful for the treatment of benign or malignant
XX proliferation of tissues, eg cancers of the gastrointestinal tract,
XX pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
XX treatment of atherosclerosis; and disorders of the gastrointestinal
XX tissues. This peptide is a claimed example of a highly generic formula.
XX See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
XX CC (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
XX correct PI field.)
XX
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
: : : : :
Db 1 AQWAVGHL 8
RESULT 51
AAR04529 standard; protein; 9 AA.
XX
XX AAR04529;
XX
XX 25-MAR-2003 (revised)
DT 24-SEP-1990 (first entry)
XX
XX Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
XX Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
XX therapeutic peptides.
XX

OS Synthetic.
XX
XX Key Location/Qualifiers
FT Modified-site 1
FT Modified-site /label= D-phenylalanine
FT Modified-site 8
FT Modified-site /label= leucine psi (CH2NH)
FT Modified-site 9
FT Modified-site /label= D-phenylalanine
XX
XX W09003980-A.
XX
XX 19-APR-1990.
XX
XX 14-OCT-1988; 88US-00257998.
XX
XX 14-OCT-1988; 88US-00257998.
XX 09-DEC-1988; 88US-00282328.
XX 02-MAR-1989; 89US-00317941.
XX 07-JUL-1989; 89US-00376555.
XX 21-AUG-1989; 89US-00397169.
XX
XX (TULA) TULANE EDUCATIONAL FUND.
XX (BIOM-) BIOMEASURE INC.
XX Coy DH, Moreau JP, Taylor JE, Kim SH;
XX WPI; 1990-147822/19.
XX
XX New non-cyclic analogues of mammalian gastrin-releasing peptide - and
XX amphibian bombesin, used for cancer treatment, e.g. small cell lung
XX carcinoma, atherosclerosis and gastrointestinal disorders.
XX
XX Claim 15; Page 52; 68pp; English.
XX
XX C-terminal = NH2. The peptide has an active site and a binding site for
XX binding to a target cell receptor, and has one of the following
XX modifications: (a) a deletion of a residue within the active site and a
XX modification of a residue outside of the active site; and (b) a
XX replacement of 1 or 2 residues within the active site with a synthetic
XX amino acid. On binding to its receptor, the analogue acts as a
XX competitive inhibitor of the naturally occurring peptide but due to the
XX modifications, fails to exhibit the normal in vivo biological activity.
XX The peptides are useful for the treatment of benign or malignant
XX proliferation of tissues, eg cancers of the gastrointestinal tract,
XX pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
XX treatment of atherosclerosis; and disorders of the gastrointestinal
XX tissues. This peptide is a claimed example of a highly generic formula.
XX See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
XX CC (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
XX correct PI field.)
XX
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
: : : : :
Db 1 FQWAVGHL 8
RESULT 52
AAR08345 standard; protein; 9 AA.
XX
XX AAR08345;
XX
XX 25-MAR-2003 (revised)
DT 04-MAR-1991 (first entry)
XX
XX Peptide bombesin antagonist.
XX


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XX 22-MAR-1990; 90GB-00006413.
XX Neoplasm; BBS; gastrin releasing peptide; h-GRP.
XX Synthetic.
XX Key Location/Qualifiers
XX Modified-site 1
XX /label= R-Thr-
XX /note= "R= 4-(ClCH2CH2)2NCGH4CO-"
XX EP402852-A.
XX 19-DEC-1990.
XX 12-JUN-1990; 90EP-00111088.
XX 15-JUN-1989; 89GB-00013844.
XX (FARM ) FARMITALIA ERBA SPA CARLO.
XX (FARM ) FARMITALIA ERBA SPA CARLO.
XX Decastigil R, Gozzini L, Lucietto F, Corradi F, Ciomei M,
XX Molinari I;
XX WPI; 1990-377607/51.
XX New peptide bombesin antagonists - for treatment of neoplasms.
XX Example 3; Page 5, 11pp; English.
XX The peptide is a bombesin antagonist, useful in the treatment of human
XX neoplasms. (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-
XX MAR-2003 to correct PI field.)
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. NO. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
Db 1 TQWAVGHL 8
RESULT 53
AAR12033
ID AAR12033 standard; protein; 9 AA.
XX AAR12033;
XX 25-MAR-2003 (revised)
XX 01-AUG-1991 (first entry)
XX Bombesin antagonist peptide (2).
XX Bombesin; antagonist; neuro-endocrine neoplasm; analogue.
XX Synthetic.
XX Key Location/Qualifiers
XX Misc-difference 1. .1
XX /label= OTHER
XX /note= "[bis(2-chloroethyl)amino]-L-PHE"
XX Modified-site 7. .7
XX /label= His (Dmp)
XX MO9106563-A.
XX 16-MAY-1991.
XX 06-NOV-1989; 89GB-00025024.
XX 06-NOV-1989; 89GB-00025024.
XX PR

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PR 22-MAR-1990; 90GB-00006413.
XX (FARM ) FARMITALIA ERBA SPA CARLO.
XX Decastigil R, Gozzini L, Corradi F, Ciomei M, Molinari I;
XX Franzetti C;
XX WPI; 1991-164130/22.
XX New peptide(s) with bombesin antagonist activity - used alone or in
XX combination with bombesin to treat neuro-endocrine neoplasms.
XX Example 1; Page 15; 37pp; English.
XX To PI is attached Boc and the L-M amide peptide bond is replaced by
XX (CH2NH). The peptide is prepared by condensation of appropriate amino
XX acids or peptides. The formation of a reduced peptide bond is
XX accomplished by condensation of an N-protected amino acid aldehyde with a
XX C-protected amino acid or peptide in the presence of a reducing agent
XX such as NaCNBH3. The peptide is a bombesin analogue which, due to the
XX alkylating moiety, displays greater receptor affinity than the parent
XX peptide and behaves as a bombesin antagonist. As a result of the presence
XX of a reduced peptide bond, the water solubility and antagonistic
XX properties are increased. See also AAR12032-35. (Updated on 25-MAR-2003
XX to correct PA field.) (Updated on 25-MAR-2003 to correct PI field.)
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. NO. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
Db 1 FQWAVGHL 8
RESULT 54
AAR14866
ID AAR14866 standard; protein; 9 AA.
XX AAR14866;
XX 25-MAR-2003 (revised)
XX 14-FEB-1992 (first entry)
XX Peptide analogue #7 of licorin, GRP, neuromedin or bombesin.
XX c-tissue proliferation; gastrin related peptide; peptide hormone.
XX Synthetic.
XX Key Location/Qualifiers
XX Modified-site 1
XX /label= D-Phe
XX Modified-site 6
XX /label= D-Ala
XX MO9117181-A.
XX 14-NOV-1991.
XX 09-MAY-1990; 90US-00520226.
XX 09-MAY-1990; 90US-00520226.
XX (TULA ) TULANE EDUCATIONAL FUND.
XX (BIOM-) BIOMASURE INC.
XX Coy DH, Kim SH, Morneau JP;
XX WPI; 1991-353721/48.
XX

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Query Match	100.0%;	Score 25;	DB 2;	length 9;
Best Local Similarity	50.0%;	Pred. No. 1.4e+06;		

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
: : : : :
Db 1 FQWAVGHL 8

RESULT 57

AAR14860
ID AAR14860 standard; peptide; 9 AA.

AC AAR14860;

DT 25-MAR-2003 (revised)
FT 14-FEB-1992 (first entry)

XX Peptide analogue #1 of litorin, GRP, neuromedin B or bombesin.

XX Tissue proliferation; gastrin related peptide; peptide hormone.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1
FT /label= OTHER
FT /note= "pglu"

XX W09117181-A.

XX 14-NOV-1991.

XX 09-MAY-1990; 90US-00520226.

XX 09-MAY-1990; 90US-00520226.

XX (TULANE) TULANE EDUCATIONAL FUND.

XX (BIOM-) BIOMEASURE INC.

XX COY DH, Kim SH, Moreau JP;

XX WPI; 1991-353721/48.

XX Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT C or bombesin, for treating cancer, preventing smooth muscle
PT proliferation and suppressing appetite and alcohol craving.

XX Claim 3; Page 17; 25pp; English.

XX The C-terminal residue is amidated. This peptide is one of 27 specific
CC examples of a highly generic formula. The peptides are all analogues of
CC either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC amphibian bombesin. They act as at least partial agonists of the natural
CC peptides. The peptide analogues are made by standard methods of synthesis
CC and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC 25-MAR-2003 to correct PA field.)

XX Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
: : : : :
Db 1 FQWAVGHL 8

RESULT 58

AAR14865
ID AAR14865 standard; protein; 9 AA.

XX AAR14865;

XX 25-MAR-2003 (revised)
DT 14-FEB-1992 (first entry)

XX Peptide analogue #6 of litorin, GRP, neuromedin B or bombesin.

XX Tissue proliferation; gastrin related peptide; peptide hormone.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1
FT /label= D-Phe
FT Modified-site 6
FT /label= D-Ala

XX W09117181-A.

XX 14-NOV-1991.

XX 09-MAY-1990; 90US-00520226.

XX 09-MAY-1990; 90US-00520226.

XX (TULANE) TULANE EDUCATIONAL FUND.

XX (BIOM-) BIOMEASURE INC.

XX COY DH, Kim SH, Moreau JP;

XX WPI; 1991-353721/48.

XX Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT C or bombesin, for treating cancer, preventing smooth muscle
PT proliferation and suppressing appetite and alcohol craving.

XX Claim 8; Page 18; 25pp; English.

XX The C-terminal residue is amidated. This peptide is one of 27 specific
CC examples of a highly generic formula. The peptides are all analogues of
CC either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC amphibian bombesin. They act as at least partial agonists of the natural
CC peptides. The peptide analogues are made by standard methods of synthesis
CC and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC 25-MAR-2003 to correct PA field.)

XX Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
: : : : :
Db 1 FQWAVGHL 8

RESULT 59

AAR14863
ID AAR14863 standard; protein; 9 AA.

XX AAR14863;

DT 25-MAR-2003 (revised)
FT 14-FEB-1992 (first entry)

XX Peptide analogue #4 of litorin, GRP, neuromedin B or bombesin.

XX Tissue proliferation; gastrin related peptide; peptide hormone.

XX Synthetic.

XX Key Location/Qualifiers

```
FT Modified-site 1
FT /label= OTHER
FT /note= "D-para-chloro-Phe"
XX
XX MO9117181-A.
XX
XX 14-NOV-1991.
XX
XX 09-MAY-1990; 90US-00520226.
XX
XX 09-MAY-1990; 90US-00520226.
XX
XX (TULANE EDUCATIONAL FUND.
XX (BIOM-) BIOMEASURE INC.
XX
XX Coy DH, Kim SH, Moreau JP;
XX
XX WPI; 1991-353721/48.
XX
XX Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
XX C or bombesin, for treating cancer, preventing smooth muscle
XX proliferation and suppressing appetite and alcohol craving.
XX
XX Claim 6; Page 18; 25pp; English.
XX
XX The C-terminal residue is amidated. This peptide is one of 27 specific
XX examples of a highly generic formula. The peptides are all analogues of
XX either litorin; the 10 amino acid C-terminal region of mammalian GRP,
XX neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
XX amphibian bombesin. They act as at least partial agonists of the natural
XX peptides. The peptide analogues are made by standard methods of synthesis
XX and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (updated on
XX 25-MAR-2003 to correct PA field.)
XX
XX Sequence 9 AA:
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
Db 1 FQMAVGH 8
1 FQMAVGH 8
RESULT 60
AAR14864
ID AAR14864 standard; protein; 9 AA.
XX
XX AAR14864;
XX
XX 25-MAR-2003 (revised)
XX 14-FEB-1992 (first entry)
XX
XX Peptide analogue #5 of litorin, GRP, neuromedin or bombesin.
XX
XX clesue proliferation; gastrin related peptide; peptide hormone.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX Modified-site 1
XX /label= OTHER
XX /note= "D-para-chloro-Phe"
XX
XX MO9117181-A.
XX
XX 14-NOV-1991.
XX
XX 09-MAY-1990; 90US-00520226.
XX
XX 09-MAY-1990; 90US-00520226.
XX
XX 09-MAY-1990; 90US-00520226.
XX
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PA (TULANE EDUCATIONAL FUND.
PA (BIOM-) BIOMEASURE INC.
XX
XX Coy DH, Kim SH, Moreau JP;
XX
XX WPI; 1991-353721/48.
XX
XX Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
XX C or bombesin, for treating cancer, preventing smooth muscle
XX proliferation and suppressing appetite and alcohol craving.
XX
XX Claim 7; Page 18; 25pp; English.
XX
XX The C-terminal residue is amidated. This peptide is one of 27 specific
XX examples of a highly generic formula. The peptides are all analogues of
XX either litorin; the 10 amino acid C-terminal region of mammalian GRP,
XX neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
XX amphibian bombesin. They act as at least partial agonists of the natural
XX peptides. The peptide analogues are made by standard methods of synthesis
XX and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (updated on
XX 25-MAR-2003 to correct PA field.)
XX
XX Sequence 9 AA:
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
Db 1 FQMAVGH 8
1 FQMAVGH 8
RESULT 61
AAR14862
ID AAR14862 standard; protein; 9 AA.
XX
XX AAR14862;
XX
XX 25-MAR-2003 (revised)
XX 14-FEB-1992 (first entry)
XX
XX Peptide analogue #3 of litorin, GRP, neuromedin or bombesin.
XX
XX clesue proliferation; gastrin related peptide; peptide hormone.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX Modified-site 1
XX /label= D-Phe
XX
XX MO9117181-A.
XX
XX 14-NOV-1991.
XX
XX 09-MAY-1990; 90US-00520226.
XX
XX 09-MAY-1990; 90US-00520226.
XX
XX 09-MAY-1990; 90US-00520226.
XX
XX (TULANE EDUCATIONAL FUND.
XX (BIOM-) BIOMEASURE INC.
XX
XX Coy DH, Kim SH, Moreau JP;
XX
XX WPI; 1991-353721/48.
XX
XX Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
XX C or bombesin, for treating cancer, preventing smooth muscle
XX proliferation and suppressing appetite and alcohol craving.
XX
XX Claim 5; Page 18; 25pp; English.
XX
```

CC The C-terminal residue is amidated. This peptide is one of 27 specific
 CC examples of a highly generic formula. The peptides are all analogues of
 CC either litorin; the 10 amino acid C-terminal region of mammalian GRP,
 CC neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
 CC amphibian bombesin. They act as at least partial agonists of the natural
 CC peptides. The peptide analogues are made by standard methods of synthesis
 CC and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
 CC 25-MAR-2003 to correct PA field.)

XX
 SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
 : : : : :
 DB 1 FQWAVGHL 8

RESULT 62

AAR14880
 ID AAR14880 standard; protein; 9 AA.

XX
 AC AAR14880;

XX 25-MAR-2003 (revised)

DT 14-FEB-1992 (first entry)

XX Cyclic analogue #1 of litorin, GRP, neuromedin or bombesin.

XX tissue proliferation; gastrin related peptide; peptide hormone.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1 /label= D-Phe

XX W09117181-A.

XX 14-NOV-1991.

XX 09-MAY-1990; 90US-00520226.

XX 09-MAY-1990; 90US-00520226.

XX (TULANE) TULANE EDUCATIONAL FUND.

XX (BIOM-) BIOMEASURE INC.

XX Coy DH, Kim SH, Moreau JP;

XX WPI; 1991-353721/48.

XX Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or

PT C or bombesin, for treating cancer, preventing smooth muscle

PT proliferation and suppressing appetite and alcohol craving.

XX Claim 23; Page 20; 25pp; English.

XX This peptide is one of 27 specific examples of a highly generic formula.

XX The peptides are all analogues of either litorin; the 10 amino acid C-

XX terminal region of mammalian GRP, neuromedin B or neuromedin C; or the 10

XX amino acid C-terminal region of amphibian bombesin. They act as at least

XX partial agonists of the natural peptides. This peptide analogue was made

XX by standard methods of synthesis and then cyclised. The linear form of

XX this peptide sequence is also covered by the invention. See AAR14860-

XX R14880 and AAR15035-R15040. (Updated on 25-MAR-2003 to correct PA field.)

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
 : : : : :
 DB 1 FQWAVGHL 8

RESULT 63

AAR14872
 ID AAR14872 standard; protein; 9 AA.

XX
 AC AAR14872;

XX 25-MAR-2003 (revised)

DT 14-FEB-1992 (first entry)

XX Peptide analogue #13 of litorin, GRP, neuromedin or bombesin.

XX tissue proliferation; gastrin related peptide; peptide hormone.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1 /label= D-Phe

FT Modified-site 9 /label= Nle

XX W09117181-A.

XX 14-NOV-1991.

XX 09-MAY-1990; 90US-00520226.

XX 09-MAY-1990; 90US-00520226.

XX (TULANE) TULANE EDUCATIONAL FUND.

XX (BIOM-) BIOMEASURE INC.

XX Coy DH, Kim SH, Moreau JP;

XX WPI; 1991-353721/48.

XX Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or

PT C or bombesin, for treating cancer, preventing smooth muscle

PT proliferation and suppressing appetite and alcohol craving.

XX Claim 15; Page 19; 25pp; English.

XX The C-terminal residue is amidated. This peptide is one of 27 specific

XX examples of a highly generic formula. The peptides are all analogues of

XX either litorin; the 10 amino acid C-terminal region of mammalian GRP,

XX neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of

XX amphibian bombesin. They act as at least partial agonists of the natural

XX peptides. The peptide analogues are made by standard methods of synthesis

XX and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on

XX 25-MAR-2003 to correct PA field.)

XX Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;

Best Local Similarity 50.0%; Pred. No. 1.4e+06;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
 : : : : :
 DB 1 FQWAVGHL 8

RESULT 64

AAR15038
 ID AAR15038 standard; protein; 9 AA.

AC	AAR15038;
XX	
DT	25-MAR-2003 (revised)
DT	14-FEB-1992 (first entry)
XX	
DE	Cyclic analogue #3 of litorin, GRP, neuromedin or bombesin.
KM	tissue proliferation; gastrin related peptide; peptide hormone.
XX	
OS	Synthetic.
FH	
FT	Key Location/Qualifiers Modified-site 1 /label = D-Phe
XX	
PN	WO9117181-A.
PD	14-NOV-1991.
XX	
PX	09-MAY-1990; 90US-00520226.
PR	09-MAY-1990; 90US-00520226.
XX	
PA	(TULANE EDUCATIONAL FUND. BIOM-) BIOMEASURE INC.
PI	Coy DH, Kim SH, Moreau JP; WPI; 1991-353721/48.
DR	
PT	Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or C or bombesin, for treating cancer, preventing smooth muscle proliferation and suppressing appetite and alcohol craving.
PS	Claim 27; Page 20; 25pp; English.
CC	This peptide is one of 27 specific examples of a highly generic formula.
CC	The peptides are all analogues of either litorin; the 10 amino acid C-terminal region of mammalian GRP, neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of amphibian bombesin. They act as at least partial agonists of the natural peptides. This peptide analogue was made by standard methods of synthesis and then cyclised. The linear form of this peptide sequence is also covered by the invention. See AARI4860-R14880 and AARI5035-R15040. (Updated on 25-MAR-2003 to correct PA field.)
SC	
SO	Sequence 9 AA:
QY	Query Match 100.0%; Score 25; DB 2; Length 9; Best Local Similarity 50.0%; Pred. No. 1.4e+06; Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
DQ	1 XXOXYVXHL 8 :: :: 1 PQMAVGHL 8
RSLT 65	
ID	AARI4861 standard; protein; 9 AA.
AC	AARI4861;
DT	25-MAR-2003 (revised)
DT	14-FEB-1992 (first entry)
XX	
DE	Peptide analogue #2 of litorin, GRP, neuromedin or bombesin.
KM	tissue proliferation; gastrin related peptide; peptide hormone.
XX	
OS	Synthetic.
FH	
FT	Key Location/Qualifiers Modified-site 1

FT		/label= D-Phe
XX		
PN	WO9117181-A.	
XX		
PD	14-NOV-1991.	
XX		
PF	09-MAY-1990;	90US-00520226.
XX		
PR	09-MAY-1990;	90US-00520226.
XX		
PA	(TULA) TULANE EDUCATIONAL FUND.	
XX	(BIOM-) BIOMEASURE INC.	
PI	Coy DH, Kim SH, Moreau JP;	
XX		
DR	WPI; 1991-353721/48.	
XX		
PT	Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or	
PT	C or bombesin, for treating cancer, preventing smooth muscle	
PT	proliferation and suppressing appetite and alcohol craving.	
XX		
PS	Claim 4; Page 18; 25pp; English.	
XX		
CC	The C-terminal residue is amidated. This peptide is one of 27 specific	
CC	examples of a highly generic formula. The peptides are all analogues of	
CC	either litorin; the 10 amino acid C-terminal region of mammalian GRP,	
CC	neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of	
CC	amphibian bombesin. They act as at least partial agonists of the natural	
CC	peptides. The peptide analogues are made by standard methods of synthesis	
CC	and can be cyclised. See ARI4860-R14880 and ARI5035-R15040. (Updated on	
CC	25-MAR-2003 to correct PA field.)	
XX		
SQ	Sequence 9 AA;	
Query Match	100.0%; Score 25; DB 2; Length 9;	
Best Local Similarity	50.0%; Pred. No. 1.4e+06;	
Matches 4; Conservative	4; Mismatches 0; Indels 0; Gaps 0;	
OY	1 XQXXVXHL 8	
	: :: ::	
Db	1 FQMAVGHL 8	
RESULT 66		
ARI4873		
ID	ARI4873 standard; protein; 9 AA.	
XX		
AC	ARI4873;	
XX		
DT	25-MAR-2003 (revised)	
DT	14-FEB-1992 (first entry)	
XX		
DB	Peptide analogue #14 of litorin, GRP, neuromedin or bombesin.	
XX		
KW	tissue proliferation; gastrin related peptide; peptide hormone.	
XX		
OS	Synthetic.	
XX		
FT	Key	Location/Qualifiers
FT	Modified-site	1
FT	Modified-site	/label= D-Phe
FT	Modified-site	6
FT	Modified-site	/label= D-Ala
FT	Modified-site	9
FT		/label= Nle
XX		
XX		
PN	WO9117181-A.	
XX		
PD	14-NOV-1991.	
XX		
PF	09-MAY-1990;	90US-00520226.
XX		
PR	09-MAY-1990;	90US-00520226.
XX		

XX (TULANE EDUCATIONAL FUND.
PA (BIOM-) BIOMEASURE INC.
XX
PI Coy DH, Kim SH, Moreau JP,
XX
DR WPI; 1991-353721/48.
XX
PT Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT C or bombesin, for treating cancer, preventing smooth muscle
PT proliferation and suppressing appetite and alcohol craving.
XX
PS Claim 16; Page 19; 25pp; English.
XX
CC The C-terminal residue is amidated. This peptide is one of 27 specific
CC examples of a highly generic formula. The peptides are all analogues of
CC either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC amphibian bombesin. They act as at least partial agonists of the natural
CC peptides. The peptide analogues are made by standard methods of synthesis
CC and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 9 AA:
XX
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 XQXXVXHL 8
: : : : :
Db 1 FQMAVAHL 8
XX
RESULT 67
AAR1521
ID AAR1521 standard; protein; 9 AA.
XX
AC AAR1521;
XX
DT 25-MAR-2003 (revised)
DT 09-JAN-2003 (revised)
DT 13-JUN-1991 (first entry)
XX
DE Example of peptide agonist of GRP, neuromedin, bombesin and litorin.
XX
KW Non-malignant proliferative disease; cancer.
XX
OS Homo sapiens.
XX
PN WO9104040-A.
XX
PD 04-APR-1991.
XX
PF 15-SEP-1989; 89US-00408125.
XX
PR 15-SEP-1989; 89US-00408125.
PR 21-NOV-1989; 89US-00440039.
PR 05-MAY-1990; 90US-00520225.
XX
PA (BIOM-) BIOMEASURE INC.
XX
PI Bogden AE, Moreau JP;
XX
DR WPI; 1991-117320/16.
XX
PT Treatment of non malignant proliferative disease and cancer - by
PT administration of natural peptide or fragment selected from gastrin-
PT releasing peptide, neuromedin, amphibian bombesin or litorin.
XX
PS Claim 17; Page 53; 73pp; English.
XX
CC This is a peptide analogue of mammalian gastrin releasing peptide (GRP),

CC neuromedin-B or -C, amphibian bombesin and litorin. It is an agonist of
CC these cpds. and is used to treat smooth muscle proliferation and cancer
CC of the prostate, breast or lung. Residue 1 (Phe) is D-phenylalanine. See
CC also AAR1519-20 and AAR1522-30. (Updated on 09-JAN-2003 to add missing
CC OS field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 9 AA:
XX
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 XQXXVXHL 8
: : : : :
Db 1 FQMAVAHL 8
XX
RESULT 68
AAR1522
ID AAR1522 standard; protein; 9 AA.
XX
AC AAR1522;
XX
DT 25-MAR-2003 (revised)
DT 09-JAN-2003 (revised)
DT 13-JUN-1991 (first entry)
XX
DE Example of peptide agonist of GRP, neuromedin, bombesin and litorin.
XX
KW Non-malignant proliferative disease; cancer.
XX
OS Homo sapiens.
XX
PN WO9104040-A.
XX
PD 04-APR-1991.
XX
PF 15-SEP-1989; 89US-00408125.
XX
PR 15-SEP-1989; 89US-00408125.
PR 21-NOV-1989; 89US-00440039.
PR 05-MAY-1990; 90US-00520225.
XX
PA (BIOM-) BIOMEASURE INC.
XX
PI Bogden AE, Moreau JP;
XX
DR WPI; 1991-117320/16.
XX
PT Treatment of non malignant proliferative disease and cancer - by
PT administration of natural peptide or fragment selected from gastrin-
PT releasing peptide, neuromedin, amphibian bombesin or litorin.
XX
PS Claim 22; Page 54; 73pp; English.
XX
CC This is a peptide analogue of mammalian gastrin releasing peptide (GRP),
CC neuromedin-B or -C, amphibian bombesin and litorin. It is an agonist of
CC these cpds. and is used to treat smooth muscle proliferation and cancer
CC of the prostate, breast or lung. Residue 6 (Ala) is D-alanine. See also
CC AAR1519-21 and AAR1523-30. (Updated on 09-JAN-2003 to add missing OS
CC field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 9 AA:
XX
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
:|::|
Db 1 FQWAVGHL 8

RESULT 69

AA11529
ID AAR11529 standard; protein; 9 AA.
XX

AC AAR11529;
XX

DT 25-MAR-2003 (revised)
DT 09-JAN-2003 (revised)
DT 13-JUN-1991 (first entry)
XX

DE Example of peptide antagonist of GRP, bombesin, neuromedin and litorin.

KW Non-malignant proliferative disease; cancer.

OS Homo sapiens.
XX

FT Key Location/Qualifiers
FT Modified-site 1..1
FT /label= OTHER
FT /note= "D-beta naphthylalanine"

PN W09104040-A.
XX

PD 04-APR-1991.
XX

PF 15-SEP-1989; 89US-00408125.
XX

PR 15-SEP-1989; 89US-00408125.
PR 21-NOV-1989; 89US-00440039.
PR 05-MAY-1990; 90US-00520225.

PA (BIOM-) BIOMEASURE INC.
XX

PI Bogden AE, Moreau JP;
XX

DR WPI; 1991-117320/16.
XX

PT Treatment of non malignant proliferative disease and cancer - by
PT administration of natural peptide or fragment selected from gastrin-
PT releasing peptide, neuromedin, amphibian bombesin or litorin.

PS Claim 42; Page 60; 73pp; English.
XX

CC This is an analogue of a natural peptide selected from: mammalian gastrin
CC releasing peptide, neuromedin-B or -C, amphibian bombesin or litorin or
CC their fragments. It is an antagonist of these cpds. and is used to treat
CC smooth muscle proliferation and cancer of the prostate, breast or lung.

CC Residues 8 (Ieu) and 9 (Phe) are linked via a peptide bond. See also
CC AAR11519-28 and AAR11530. (Updated on 09-JAN-2003 to add missing OS
CC field.) (Updated on 25-MAR-2003 to correct PI field.)
XX

CC Sequence 9 AA;
XX

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
:|::|
Db 1 AQWAVGHL 8

OS Homo sapiens.
XX

RESULT 70

AA11525
ID AAR11525 standard; protein; 9 AA.
XX

AC AAR11525;
XX

DT 25-MAR-2003 (revised)
DT 09-JAN-2003 (revised)
DT 13-JUN-1991 (first entry)
XX

DE Example of peptide agonist of GRP, neuromedin, bombesin and litorin.

KW Non-malignant proliferative disease; cancer; cyclic.

OS Homo sapiens.
XX

PN W09104040-A.
XX

PD 04-APR-1991.
XX

PF 15-SEP-1989; 89US-00408125.
XX

PR 15-SEP-1989; 89US-00408125.
PR 21-NOV-1989; 89US-00440039.
PR 05-MAY-1990; 90US-00520225.

PA (BIOM-) BIOMEASURE INC.
XX

PI Bogden AE, Moreau JP;
XX

DR WPI; 1991-117320/16.
XX

PT Treatment of non malignant proliferative disease and cancer - by
PT administration of natural peptide or fragment selected from gastrin-
PT releasing peptide, neuromedin, amphibian bombesin or litorin.

PS Claim 33; Page 55; 73pp; English.
XX

CC This is a peptide analogue of mammalian gastrin releasing peptide (GRP),
CC neuromedin-B or -C, amphibian bombesin and litorin. It is an agonist of
CC these cpds. and is used to treat smooth muscle proliferation and cancer
CC of the prostate, breast or lung. Residue 1 (Phe) is D-phenylalanine. See
CC also AAR11519-24 and AAR11526-30. (Updated on 09-JAN-2003 to add missing
CC OS field.) (Updated on 25-MAR-2003 to correct PI field.)
XX

CC Sequence 9 AA;
XX

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
:|::|
Db 1 FQWAVGHL 8

OS Homo sapiens.
XX

RESULT 71

AA11520
ID AAR11520 standard; protein; 9 AA.
XX

AC AAR11520;
XX

DT 25-MAR-2003 (revised)
DT 09-JAN-2003 (revised)
DT 13-JUN-1991 (first entry)
XX

DE Example of peptide agonist of GRP, neuromedin, bombesin and litorin.

KW Non-malignant proliferative disease; cancer.

OS Homo sapiens.
XX

PN W09104040-A.
XX

FT Key Location/Qualifiers
FT Modified-site 1..1
FT /label= OTHER
FT /note= "pyroglutamy1"

PN W09104040-A.
XX

PD 04-APR-1991.
 XX
 XX 15-SEP-1989; 89US-00408125.
 XX
 PR 15-SEP-1989; 89US-00408125.
 PR 21-NOV-1989; 89US-00440039.
 PR 05-MAY-1990; 90US-00520225.
 XX
 PA (BIOM-) BIOMEASURE INC.
 XX
 PI Bogden AE, Moreau JP;
 XX
 DR WPI; 1991-117320/16.
 XX
 PT Treatment of non malignant proliferative disease and cancer - by
 PT administration of natural peptide or fragment selected from gastrin-
 PT releasing peptide, neuromedin, amphibian bombesin or litorin.
 XX
 PS Claim 15; Page 53; 73pp; English.
 XX
 CC This is a peptide analogue of mammalian gastrin releasing peptide (GRP),
 CC neuromedin-B or -C, amphibian bombesin and litorin. It is an agonist of
 CC these cpds. and is used to treat smooth muscle proliferation and cancer
 CC of the prostate, breast or lung. See also AAR1519 and AAR1521-30.
 CC (Updated on 09-JAN-2003 to add missing OS field.) (Updated on 25-MAR-2003
 CC to correct PI field.)
 XX
 SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 : : : : :
 Db 1 QQWAVGHL 8

RESULT 72

AAR24488
 ID AAR24488 standard; protein; 9 AA.

XX AAR24488;

XX 25-MAR-2003 (revised)

DT 09-DEC-1992 (first entry)

XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (6).

XX Bombesin; GRP; gastrin releasing peptide.

XX Synthetic.

OS Key Location/Qualifiers

XX Modified-site 1

FT /label= OTHER
 FT /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
 FT carboxylic acid in D-form"

FT Modified-site 8

FT /label= psi
 FT /note= "residues 8-9 are linked via a pseudo peptide
 FT bond"

FT Modified-site 9

FT /label= psi
 FT /note= "residues 8-9 are linked via a pseudo peptide
 FT bond"

XX W09209626-A1.

XX 11-JUN-1992.

XX 15-NOV-1991; 91WO-US008534.

XX

PR 29-NOV-1990; 90US-00619747.
 XX
 XX (TULA) TULANE EDUCATIONAL FUND.
 PA
 PI Schally AV, Cai RZ;
 XX
 DR WPI; 1992-217019/26.
 XX

PT New nona-peptide bombesin antagonists - used for treating
 PT hypergastrinaemic states, such as pernicious anaemia and Zollinger-
 PT Ellison syndrome and also used against lung and gastric cancer, etc.

XX Claim 4; Page 42; 50pp; English.

XX The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
 CC releasing peptide) antagonist and is useful for treatment of states of
 CC hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
 CC Zollinger-Ellison syndrome and vitiligo, associated with diffuse
 CC hyperplasia of gastric enterochromaffin-like cells, and with an increased
 CC risk of developing multifocal gastric carcinoid tumours. The peptide can
 CC also be used to treat lung, colon and gastric cancer. Dosage is 1-1000
 CC microg/Kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
 XX

SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 62.5%; Pred. No. 1.4e+06;
 Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 : : : : :
 Db 1 QQWAVGHL 8

RESULT 73

AAR24489
 ID AAR24489 standard; protein; 9 AA.

XX AAR24489;

XX 25-MAR-2003 (revised)

DT 09-DEC-1992 (first entry)

XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (7).

XX Bombesin; GRP; gastrin releasing peptide.

XX Synthetic.

OS Key Location/Qualifiers

XX Modified-site 1

FT /label= OTHER
 FT /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
 FT carboxylic acid in D-form"

FT Modified-site 8

FT /label= psi
 FT /note= "residues 8-9 are linked via a pseudo peptide
 FT bond"

FT Modified-site 9

FT /label= psi
 FT /note= "residues 8-9 are linked via a pseudo peptide
 FT bond"

XX W09209626-A1.

XX 11-JUN-1992.

XX 15-NOV-1991; 91WO-US008534.

XX 29-NOV-1990; 90US-00619747.

XX (TULA) TULANE EDUCATIONAL FUND.

XX

```

PI Schally AV, Cai RZ;
XX WPI; 1992-217019/26.
XX
XX New nona:peptide bombesin antagonists - used for treating
PT hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS Claim 5; Page 42; 50pp; English.
XX
CC The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC releasing peptide) antagonist and is useful for treatment of states of
CC hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC risk of developing multifocal gastric carcinoid tumours. The peptide can
CC also be used to treat lung, colon and gastric cancers. Dosage is 1-1000
CC microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
OY 1 XXXXXVXHL 8
Db 1 XQWAVGHL 8
RESULT 74
AAR28447
ID AAR28447 standard; protein; 9 AA.
XX
AC AAR28447;
XX
DT 25-MAR-2003 (revised)
DT 09-DEC-1992 (first entry)
XX
DE [psi8-9 pseudo] Nonapeptide bombesin antagonist (13).
XX
KM Bombesin; GRP; gastrin releasing peptide.
XX
OS Synthetic.
XX
FH Key location/Qualifiers
FT Modified-site 1 /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT Modified-site 8 carboxylic acid in D-form"
FT /label= psi
FT /note= "residues 8-9 are linked via a pseudo peptide
FT bond"
FT 9
FT /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT carboxylic acid; residues 8-9 are linked via a pseudo
FT peptide bond"
FT
FT Modified-site
FT 9
FT /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT carboxylic acid; residues 8-9 are linked via a pseudo
FT peptide bond"
FT
XX MO9209626-A1.
XX
PD 11-JUN-1992.
XX
PF 15-NOV-1991; 91WO-US008534.
XX
PR 29-NOV-1990; 90US-00619747.
XX
PA (TULA ) TULANE EDUCATIONAL FUND.
XX
PI Schally AV, Cai RZ;
XX WPI; 1992-217019/26.
XX
XX New nona:peptide bombesin antagonists - used for treating

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PT hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT Ellison syndrome and also used against lung and gastric cancer, etc.
XX
XX Claim 11; Page 42; 50pp; English.
XX
CC The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC releasing peptide) antagonist and is useful for treatment of states of
CC hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC risk of developing multifocal gastric carcinoid tumours. The peptide can
CC also be used to treat lung, colon and gastric cancers. Dosage is 1-1000
CC microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX Sequence 9 AA;
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
OY 1 XXXXXVXHL 8
Db 1 XQWAVGHL 8
RESULT 75
AAR28462
ID AAR28462 standard; protein; 9 AA.
XX
AC AAR28462;
XX
DT 25-MAR-2003 (revised)
DT 09-DEC-1992 (first entry)
XX
DE [psi8-9 pseudo] Nonapeptide bombesin antagonist (30).
XX
KM Bombesin; GRP; gastrin releasing peptide.
XX
OS Synthetic.
XX
FH Key location/Qualifiers
FT Modified-site 1 /label= OTHER
FT /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT Modified-site 8 carboxylic acid in D-form"
FT /label= psi
FT /note= "residues 8-9 are linked via a pseudo peptide
FT bond"
FT 9
FT /label= psi
FT /note= "Tyr(For), For= formyl; residues 8-9 are linked
FT via a pseudo peptide bond"
FT
XX MO9209626-A1.
XX
PD 11-JUN-1992.
XX
PF 15-NOV-1991; 91WO-US008534.
XX
PR 29-NOV-1990; 90US-00619747.
XX
PA (TULA ) TULANE EDUCATIONAL FUND.
XX
PI Schally AV, Cai RZ;
XX WPI; 1992-217019/26.
XX
XX New nona:peptide bombesin antagonists - used for treating
PT hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT Ellison syndrome and also used against lung and gastric cancer, etc.
XX
XX Disclosure; Page 9; 50pp; English.

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XX The C-terminal is amidated. The peptide is an example of a highly generic
 CC formula for bombesin antagonists which are [ps18-9 pseudo] nonapeptides
 CC contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
 CC pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
 CC The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
 CC is useful for treatment of states of hypergastrinemia, e.g. pernicious
 CC anemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
 CC villigo, associated with diffuse hyperplasia of gastric enterochromaffin
 CC -like cells, and with an increased risk of developing multifocal gastric
 CC carcinoid tumours. The peptide can also be used to treat lung, colon and
 CC gastric cancers. Dosage is 1-1000 microg/kg parenterally. (Updated on
 CC 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA:

Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 62.5%; Pred. No. 1.4e+06;
 Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 :|::|:
 Db 1 XQWAVGHL 8

RESULT 76

AAR28458 ID AAR28458 standard; protein; 9 AA.

XX AAR28458;

DT 25-MAR-2003 (revised)

DT 09-DEC-1992 (first entry)

XX [ps18-9 pseudo] Nonapeptide bombesin antagonist (26).

XX Bombesin; GRP; gastrin releasing peptide.

XX Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 1 /note= "D-form residue"

FT Modified-site 8 /label= psi

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT Modified-site 9 /label= psi

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

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FT /note= "residues 8-9 are linked via a pseudo peptide bond"

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FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

CC formula for bombesin antagonists which are [ps18-9 pseudo] nonapeptides
 CC contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
 CC pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
 CC The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
 CC is useful for treatment of states of hypergastrinemia, e.g. pernicious
 CC anemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
 CC villigo, associated with diffuse hyperplasia of gastric enterochromaffin
 CC -like cells, and with an increased risk of developing multifocal gastric
 CC carcinoid tumours. The peptide can also be used to treat lung, colon and
 CC gastric cancers. Dosage is 1-1000 microg/kg parenterally. (Updated on
 CC 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA:

Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 :|::|:
 Db 1 XQWAVGHL 8

RESULT 77

AAR24491 ID AAR24491 standard; protein; 9 AA.

XX AAR24491;

DT 25-MAR-2003 (revised)

DT 09-DEC-1992 (first entry)

XX [ps18-9 pseudo] Nonapeptide bombesin antagonist (9).

XX Bombesin; GRP; gastrin releasing peptide.

XX Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 1 /note= "D-form residue"

FT Modified-site 8 /label= psi

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT Modified-site 9 /label= psi

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

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FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

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FT /note= "residues 8-9 are linked via a pseudo peptide bond"

CC Zollinger-Ellison syndrome and vitiligo, associated with diffuse
 CC hyperplasia of gastric enterochromaffin-like cells, and with an increased
 CC risk of developing multifocal gastric carcinoid tumours. The peptide can
 CC also be used to treat lung, colon and gastric cancers. Dosage is 1-1000
 CC microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA;

SQ Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHL 8
 : : : : :
 Db 1 QWMAVGHL 8

RESULT 78
 AAR28448
 ID AAR28448 standard; protein; 9 AA.

XX AAR28448;

XX 25-MAR-2003 (revised)
 DT 09-DEC-1992 (first entry)

XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (17).

XX Bombesin; GRP; gastrin releasing peptide.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1 /note= "R-Trp; R= NH2CO"

FT Modified-site 8 /label= psi

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT Modified-site 9

FT /label= psi

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

XX WO9209626-A1.

XX 11-JUN-1992.

XX 15-NOV-1991; 91WO-US008534.

XX 29-NOV-1990; 90US-00619747.

XX (TULANE) TULANE EDUCATIONAL FUND.

XX Schally AV, Cai RZ;

XX WPI; 1992-217019/26.

XX New nona-peptide bombesin antagonists - used for treating
 PT hypergastrinaemic states, such as pernicious anaemia and Zollinger-
 PT Ellison syndrome and also used against lung and gastric cancer, etc.

XX Disclosure; Page 7; 50pp; English.

XX The C-terminal is amidated. The peptide is an example of a highly generic
 CC formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
 CC contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
 CC pyrido[3,4-b]indol-3-carboxylic acid (Trp) at the N- and/or C-terminal.
 CC The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
 CC is useful for treatment of states of hypergastrinemia, e.g. pernicious
 CC anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
 CC vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
 CC -like cells, and with an increased risk of developing multifocal gastric

CC carcinoid tumours. The peptide can also be used to treat lung, colon and
 CC gastric cancers. Dosage is 1-1000 microg/kg parenterally. (Updated on
 CC 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA;

SQ Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHL 8
 : : : : :
 Db 1 QWMAVGHL 8

RESULT 79
 AAR24490
 ID AAR24490 standard; protein; 9 AA.

XX AAR24490;

XX 25-MAR-2003 (revised)
 DT 09-DEC-1992 (first entry)

XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (8).

XX Bombesin; GRP; gastrin releasing peptide.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1 /label= OTHER

FT /note= "pyroglutamic acid in D-form"

FT Modified-site 8 /label= psi

FT /note= "residues 8-9 are linked via a pseudo peptide bond"

FT Modified-site 9

FT /note= "2,3,4,9 tetrahydro-1-H-pyrido-[3,4-b] indole-3-
 carboxylic acid in D-form; residues 8-9 are linked via a
 pseudo peptide bond"

XX WO9209626-A1.

XX 11-JUN-1992.

XX 15-NOV-1991; 91WO-US008534.

XX 29-NOV-1990; 90US-00619747.

XX (TULANE) TULANE EDUCATIONAL FUND.

XX Schally AV, Cai RZ;

XX WPI; 1992-217019/26.

XX New nona-peptide bombesin antagonists - used for treating
 PT hypergastrinaemic states, such as pernicious anaemia and Zollinger-
 PT Ellison syndrome and also used against lung and gastric cancer, etc.

XX Claim 6; Page 42; 50pp; English.

XX The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
 CC releasing peptide) antagonist and is useful for treatment of states of
 CC hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
 CC Zollinger-Ellison syndrome and vitiligo, associated with diffuse
 CC hyperplasia of gastric enterochromaffin-like cells, and with an increased
 CC risk of developing multifocal gastric carcinoid tumours. The peptide can
 CC also be used to treat lung, colon and gastric cancers. Dosage is 1-1000
 CC microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHL 8
:|:|:|
Db 1 QQWAVGHL 8

RESULT 80
ID AAR28460 standard; protein; 9 AA.
XX AAR28460;

XX 25-MAR-2003 (revised)
DT 09-DEC-1992 (first entry)

XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (28).

XX Bombesin; GRP; gastrin releasing peptide.

XX Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 1 /note= "D-form residue"

FT Modified-site 8

FT /label= psi
/note= "residues 8-9 are linked via a pseudo peptide bond"

FT Modified-site 9
/label= psi
/note= "trp(For), For= formyl; residues 8-9 are linked via a pseudo peptide bond"

FT W09209626-A1.

XX 11-JUN-1992.

XX 15-NOV-1991; 91WO-US008534.

XX 29-NOV-1990; 90US-00619747.

XX (TULANE) TULANE EDUCATIONAL FUND.

XX Schally AV, Cai RZ;

XX WPI; 1992-217019/26.

XX New nona-peptide bombesin antagonists - used for treating

XX hypergastrinaemic states, such as pernicious anaemia and Zollinger-

XX Ellison syndrome and also used against lung and gastric cancer, etc.

XX Disclosure; Page 8; 50pp; English.

XX The C-terminal is amidated. The peptide is an example of a highly generic
XX formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
XX contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
XX pyrido[3,4-b]-indol-3-carboxylic acid (Trp) at the N- and/or C-terminal.
XX The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
XX is useful for treatment of states of hypergastrinemia, e.g. pernicious
XX anemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
XX vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
XX -like cells, and with an increased risk of developing multifocal gastric
XX carcinoid tumours. The peptide can also be used to treat lung, colon and
XX gastric cancers. Dosage is 1-1000 microg/kg parenterally. (Updated on
XX 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;

Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHL 8
:|:|:|
Db 1 QQWAVGHL 8

RESULT 81
ID AAR24486 standard; protein; 9 AA.
XX AAR24486;

XX 25-MAR-2003 (revised)

DT 09-DEC-1992 (first entry)

XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (4).

XX Bombesin; GRP; gastrin releasing peptide.

XX Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 1 /note= "D-form residue"

FT Modified-site 8

FT /label= psi
/note= "residues 8-9 are linked via a pseudo peptide bond"

FT Modified-site 9
/label= psi
/note= "residues 8-9 are linked via a pseudo peptide bond"

FT W09209626-A1.

XX 11-JUN-1992.

XX 15-NOV-1991; 91WO-US008534.

XX 29-NOV-1990; 90US-00619747.

XX (TULANE) TULANE EDUCATIONAL FUND.

XX Schally AV, Cai RZ;

XX WPI; 1992-217019/26.

XX New nona-peptide bombesin antagonists - used for treating

XX hypergastrinaemic states, such as pernicious anaemia and Zollinger-

XX Ellison syndrome and also used against lung and gastric cancer, etc.

XX Claim 2; Page 41; 50pp; English.

XX The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
XX releasing peptide) antagonist and is useful for treatment of states of
XX hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
XX Zollinger-Ellison syndrome and vitiligo, associated with diffuse
XX hyperplasia of gastric enterochromaffin-like cells, and with an increased
XX risk of developing multifocal gastric carcinoid tumours. The peptide can
XX also be used to treat lung, colon and gastric cancers. Dosage is 1-1000
XX microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHL 8
:|:|:|
Db 1 QQWAVGHL 8

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RESULT 82
ID AAR24492 standard; protein; 9 AA.
XX
XX AAR24492;
XX
XX 25-MAR-2003 (revised)
XX DT 09-DEC-1992 (first entry)
XX
XX [psia8-9 pseudo] Nonapeptide bombesin antagonist (10).
XX
XX Bombesin; GRP; gastrin releasing peptide.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX FT Misc-difference 1 /note= "D-form residue"
XX FT Modified-site 8 /label= psi
XX FT /note= "residues 8-9 are linked via a pseudo peptide
XX FT bond"
XX FT Modified-site 9 /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
XX FT carboxylic acid in D-form; residues 8-9 are linked via a
XX FT pseudo peptide bond"
XX
XX PM MO9209626-A1.
XX
XX PD 11-JUN-1992.
XX
XX PF 15-NOV-1991; 91WO-US008534.
XX
XX PR 29-NOV-1990; 90US-00619747.
XX
XX (TULIA ) TULANE EDUCATIONAL FUND.
XX
XX PA Schally AV, Cai RZ;
XX
XX PI WPI; 1992-217019/26.
XX
XX DR New nona-peptide bombesin antagonists - used for treating
XX PT hypergastrinaemic states, such as pernicious anaemia and Zollinger-
XX PT Ellison syndrome and also used against lung and gastric cancer, etc.
XX
XX PS Claim 8; Page 42; 50pp; English.
XX
XX CC The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
XX CC releasing peptide) antagonist and is useful for treatment of states of
XX CC hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
XX CC Zollinger-Elison syndrome and vitiligo, associated with diffuse
XX CC hyperplasia of gastric enterochromaffin-like cells, and with an increased
XX CC risk of developing multifocal gastric carcinoid tumours. The peptide can
XX CC also be used to treat lung, colon and gastric cancers. Dosage is 1-1000
XX CC microg/kg parenterally. (updated on 25-MAR-2003 to correct FN field.)
XX
XX SQ Sequence 9 AA;
XX
XX Query Match 100.0%; Score 25; DB 2; Length 9;
XX Best Local Similarity 50.0%; Pred.No.1.4e+06;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
XX OY 1 XQXVYXHL 8
XX :|:|:|:|
XX 1 WQWAVGHL 8
XX
XX RESULT 83
XX ID AAR28673 standard; protein; 9 AA.
XX

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AC	AAR28673;
XX	
DT	25-MAR-2003 (revised)
DT	09-DEC-1992 (first entry)
XX	
DE	[ps18-9 pseudo] Nonapeptide bombesin antagonist (32).
XX	
KM	Bombesin; GRP, gastrin releasing peptide.
OS	Synthetic.
XX	
FH	Key
FT	Modified-site
FT	Location/Qualifiers 1 /label= OTHER /note= "NH ₂ CO-Tpi, Tpi= 2,3,4,9 tetrahydro-1-H-pyrido-[3,4-b]-indole-3-carboxylic acid"
FT	Modified-site
FT	8 /label= psi /note= "residues 8-9 are linked via a pseudo peptide bond"
FT	Modified-site
FT	9 /label= OTHER /note= "Tpi-Ome, Tpi= 2,3,4,9 tetrahydro-1-H-pyrindo-[3,4-b]-indole-3-carboxylic acid; residues 8-9 are linked via a pseudo peptide bond"
PN	W09209626-AI.
PD	11-JUN-1992.
XX	
PF	15-NOV-1991; 91WO-US008534.
PR	29-NOV-1990; 90US-00619747.
PA	(TULIA) TULIANE EDUCATIONAL FUND.
PI	Schally AV, Cat RZ;
DR	WI; 1992-217019/26.
XX	
PT	New nona-peptide bombesin antagonists - used for treating hypergastrinaemic states, such as pernicious anaemia and Zollinger-Ellison syndrome and also used against lung and gastric cancer, etc.
PS	Disclosure; Page 9; 50pp; English.
CC	The C-terminal is amidated. The peptide is an example of a highly generic formula for bombesin antagonists which are [ps18-9 pseudo] nonpeptides contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-pyrid[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal. The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and is useful for treatment of states of hypergastrinemia, e.g. pernicious anemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and villig, associated with diffuse hyperplasia of gastric enterochromaffin-like cells, and with an increased risk of developing multifocal gastric carcinoma tumours. The peptide can also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000 microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
SO	Sequence 9 AA:
QY	Query Match 100.0%; Score 25; DB 2; Length 9; Best Local Similarity 62.5%; Pred. No. 1.4e+06; Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
ID	AAR24483 standard; peptide; 9 AA. AAR24483 ID AAR24483 standard; peptide; 9 AA.

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XX AAR24483;
XX 25-MAR-2003 (revised)
XX 09-DEC-1992 (first entry)
XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (1).
XX Bombesin; GRP; gastrin releasing peptide.
XX Synthetic.
XX Key Location/Qualifiers
XX Misc-difference 1 /note= "D-form residue"
XX Modified-site 8 /label= psi
XX /note= "residues 8-9 are linked via a pseudo peptide
XX bond"
XX Modified-site 9 /label= psi
XX /note= "residues 8-9 are linked via a pseudo peptide
XX bond"
XX MO9209626-A1.
XX 11-JUN-1992.
XX 15-NOV-1991; 91WO-US008534.
XX 29-NOV-1990; 90US-00619747.
XX (TULA ) TULANE EDUCATIONAL FUND.
XX Schally AV, Cai RZ;
XX WPI; 1992-217019/26.
XX New nona-peptide bombesin antagonists - used for treating
XX hypergastrinemic states, such as pernicious anaemia and Zollinger-
XX Ellison syndrome and also used against lung and gastric cancer, etc.
XX Claim 2; Page 41; 50pp; English.
XX The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
XX releasing peptide) antagonist and is useful for treatment of states of
XX hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
XX Zollinger-Ellison syndrome and vitiligo, associated with diffuse
XX hyperplasia of gastric enterochromaffin-like cells, and with an increased
XX risk of developing multifocal gastric carcinoma tumours. The peptide can
XX also be used to treat lung, colon and gastric cancers. Dosage is 1-1000
XX microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX Sequence 9 AA;
XX
XX Query Match 100.0%; Score 25; DB 2; Length 9;
XX Best Local Similarity 50.0%; Pred. No. 1.4e+06;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 XQXXVXHL 8
XX 1 XQMAVGH 8
XX
XX RESULT 85
XX AAR24493
XX ID AAR24493 standard; protein; 9 AA.
XX
XX AAR24493;
XX 25-MAR-2003 (revised)
XX 09-DEC-1992 (first entry)
XX

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DE [psi8-9 pseudo] Nonapeptide bombesin antagonist (11).
XX Bombesin; GRP; gastrin releasing peptide.
XX Synthetic.
XX Key Location/Qualifiers
XX Modified-site 1 /note= "R-2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
XX carboxylic acid; R= H, NH2CO, acetyl, octanoyl or 3-
XX hydroxy-2-naphthoyl"
XX Modified-site 8 /label= psi
XX /note= "residues 8-9 are linked via a pseudo peptide
XX bond"
XX Modified-site 9 /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
XX carboxylic acid; residues 8-9 are linked via a pseudo
XX peptide bond"
XX MO9209626-A1.
XX 11-JUN-1992.
XX 15-NOV-1991; 91WO-US008534.
XX 29-NOV-1990; 90US-00619747.
XX (TULA ) TULANE EDUCATIONAL FUND.
XX Schally AV, Cai RZ;
XX WPI; 1992-217019/26.
XX New nona-peptide bombesin antagonists - used for treating
XX hypergastrinemic states, such as pernicious anaemia and Zollinger-
XX Ellison syndrome and also used against lung and gastric cancer, etc.
XX Claim 9-10; Page 42; 50pp; English.
XX The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
XX releasing peptide) antagonist and is useful for treatment of states of
XX hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
XX Zollinger-Ellison syndrome and vitiligo, associated with diffuse
XX hyperplasia of gastric enterochromaffin-like cells, and with an increased
XX risk of developing multifocal gastric carcinoma tumours. The peptide can
XX also be used to treat lung, colon and gastric cancers. Dosage is 1-1000
XX microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX Sequence 9 AA;
XX
XX Query Match 100.0%; Score 25; DB 2; Length 9;
XX Best Local Similarity 62.5%; Pred. No. 1.4e+06;
XX Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 XQXXVXHL 8
XX 1 XQMAVGH 8
XX
XX RESULT 86
XX AAR28461
XX ID AAR28461 standard; protein; 9 AA.
XX
XX AAR28461;
XX 25-MAR-2003 (revised)
XX 09-DEC-1992 (first entry)
XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (29).
XX Bombesin; GRP; gastrin releasing peptide.
XX

```

OS Synthetic.
XX Key Location/Qualifiers
FH Misc-difference 1 /note= "D-form residue"
FT Modified-site 8 /label= psi
FT /note= "residues 8-9 are linked via a pseudo peptide bond"
FT Modified-site 9 /label= psi
FT /note= "TTP(For), For= formyl, residues 8-9 are linked via a pseudo peptide bond"
FT
FT
XX W09209626-A1.
PN 11-JUN-1992.
XX
XX PD 15-NOV-1991; 91WO-US008534.
XX PF 29-NOV-1990; 90US-00619747.
XX PR (TULA) TULANE EDUCATIONAL FUND.
XX PA Schally AV, Cai RZ;
XX PI WPI; 1992-217019/26.
XX DR
XX PT New nona-peptide bombesin antagonists - used for treating hypergastrinaemic states, such as pernicious anaemia and Zollinger-Ellison syndrome and also used against lung and gastric cancer, etc.
PT
XX PT
XX PS Disclosure; Page 9; 50pp; English.
XX
XX CC The C-terminal is amidated. The peptide is an example of a highly generic formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and is useful for treatment of states of hypergastrinemia, e.g. pernicious CC anemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and CC vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin CC -like cells, and with an increased risk of developing multifocal gastric CC carcinoid tumours. The peptide can also be used to treat lung, colon and CC gastric cancers. Dosage is 1- 1000 microg/kg parenterally. (Updated on CC 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 9 AA;
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHL 8
|:::|
Db 1 QQWAVGHL 8
RESULT 87
AAR28674
ID AAR28674 standard; protein; 9 AA.
XX
XX AAR28674;
AC
XX 25-MAR-2003 (revised)
DT 09-DEC-1992 (first entry)
XX
XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (33).
XX Bombesin; GRP; gastrin releasing peptide.
XX Synthetic.
OS

FH Key Location/Qualifiers
FT Modified-site 1 /label= OTHER
FT /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b]- indole-3-carboxylic acid in D-form"
FT Modified-site 8 /label= psi
FT /note= "residues 8-9 are linked via a pseudo peptide bond"
FT Modified-site 9 /label= OTHER
FT /note= "Tpi-R, Tpi= 2,3,4,9 tetrahydro-1 H- pyrido-[3,4-b]- indole-3-carboxylic acid; R= NHMe, OH, N2H2CONH2; residues 8-9 are linked via a pseudo peptide bond"
FT
FT
XX W09209626-A1.
PN 11-JUN-1992.
XX
XX PD 15-NOV-1991; 91WO-US008534.
XX PF 29-NOV-1990; 90US-00619747.
XX PR (TULA) TULANE EDUCATIONAL FUND.
XX PA Schally AV, Cai RZ;
XX PI WPI; 1992-217019/26.
XX DR
XX PT New nona-peptide bombesin antagonists - used for treating hypergastrinaemic states, such as pernicious anaemia and Zollinger-Ellison syndrome and also used against lung and gastric cancer, etc.
PT
XX PT
XX PS Disclosure; Page 9; 50pp; English.
XX
XX CC The C-terminal is amidated. The peptide is an example of a highly generic formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and is useful for treatment of states of hypergastrinemia, e.g. pernicious CC anemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and CC vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin CC -like cells, and with an increased risk of developing multifocal gastric CC carcinoid tumours. The peptide can also be used to treat lung, colon and CC gastric cancers. Dosage is 1- 1000 microg/kg parenterally. (Updated on CC 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 9 AA;
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHL 8
|:::|
Db 1 QQWAVGHL 8
RESULT 88
AAR28450
ID AAR28450 standard; protein; 9 AA.
XX
XX AAR28450;
AC
XX 25-MAR-2003 (revised)
DT 09-DEC-1992 (first entry)
XX
XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (19).
XX Bombesin; GRP; gastrin releasing peptide.
XX Synthetic.
OS

XX		
FH	Key	Location/Qualifiers
FT	Modified-site	1 /note= "3F-D-Trp"
FT		8
FT	Modified-site	/label= psi
FT		/note= "residues 8-9 are linked via a pseudo peptide bond"
FT	Modified-site	9 /label= psi
FT		/note= "residues 8-9 are linked via a pseudo peptide bond"
XX		
PN	WO9209626-A1.	
PD	11-JUN-1992.	
PP		
PF	15-NOV-1991;	91WO-US008534.
PR	29-NOV-1990;	90US-00619747.
PA	(TULSA) TULANE EDUCATIONAL FUND.	
PI	Schally AV, Cai RZ;	
XX		
DR	WPI; 1992-217019/26.	
XX		
PT	New nona-peptide bombesin antagonists - used for treating hypergastrinaemic states, such as pernicious anaemia and Zollinger-Ellison syndrome and also used against lung and gastric cancer, etc.	
PS	Disclosure; Page 8; 50pp; English.	
XX		
CC	The C-terminal is amidated. The peptide is an example of a highly generic formula for bombesin antagonists which are [psi18-9 pseudo] nonapeptides contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.	
CC	The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and is useful for treatment of states of hypergastrinemia, e.g. pernicious anemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and villiglo, associated with diffuse hyperplasia of gastric enterochromaffin-like cells, and with an increased risk of developing multifocal gastric carcinoma tumours. The peptide can also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000 microg/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)	
CC		
CC		
CC		
SO	Sequence 9 AA:	
	Query Match	100.0%; Score 25; DB 2; Length 9;
	Best Local Similarity	50.0%; Pred. No. 1.4e+06;
	Matches 4; Conservative	4; Mismatches 0; Indels 0; Gaps 0;
OY	1 XOXVXHL 8	
	: : : :	
DB	1 WQAVGHL 8	
RESULT 89		
ID	AAR28454 standard; protein; 9 AA.	
AC	AAR28454;	
DT	25-MAR-2003 (revised)	
DT	09-DEC-1992 (first entry)	
DE	[psi18-9 pseudo] Nonapeptide bombesin antagonist (22).	
XX	Bombesin; GRP; gastrin releasing peptide.	
OS	Synthetic.	
FH	Key	Location/Qualifiers

FT	Modified-site	1	/note= "R-Trp; R= NH2CO"
FT	Modified-site	8	/label= psi
FT	Modified-site	9	/note= "residues 8-9 are linked via a pseudo peptide bond"
FT	Modified-site	9	/label= psi
FT	Modified-site	9	/note= "residues 8-9 are linked via a pseudo peptide bond"
PN			
XX	WO9209626-A1.		
XX	11-JUN-1992.		
PD			
XX	15-NOV-1991;	91WO-US008534.	
XX	29-NOV-1990;	90US-00619747.	
XX			
PA	(TULANE) TULANE EDUCATIONAL FUND.		
PI	Schally AV, Cai RZ;		
XX	WPI, 1992-217019/26.		
DR			
XX			
PT	New nona:peptide bombesin antagonists - used for treating		
PT	hypergastrinaemic states, such as pernicious anaemia and Zollinger-		
PT	Ellison syndrome and also used against lung and gastric cancer, etc.		
XX			
PS	Disclosure; Page 8; 50pp; English.		
XX			
CC	The C-terminal is amidated. The peptide is an example of a highly generic		
CC	formula for bombesin antagonists which are [psi18-9 pseudo] nonapeptides		
CC	contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-		
CC	pyrido[3,4-b]-indol-3-carboxylic acid (Trp1) at the N- and/or C-terminal.		
CC	The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and		
CC	is useful for treatment of states of hypergastrinemia, e.g. pernicious		
CC	anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and		
CC	villiligo, associated with diffuse hyperplasia of gastric enterochromaffin		
CC	-like cells, and with an increased risk of developing multifocal gastric		
CC	carcinoid tumours. The peptide can also be used to treat lung, colon and		
CC	gastric cancers. Dosage is 1-1000 microg/kg parenterally. (Updated on		
CC	25-MAR-2003 to correct PN field.)		
XX			
XX			
SQ	Sequence 9 AA;		
	Query Match	100.0%;	Score 25; DB 2; Length 9;
	Best Local Similarity	50.0%;	Pred. No. 1.4e+06;
	Matches 4; Conservative	4; Mismatches 0;	Indels 0; Gaps 0
QY	1 QXXVXVXL 8		
	: :: ::		
Db	1 WQNAVGH 8		
RESULT 90			
ID	AA28463		
	AA28463 standard; protein; 9 AA.		
XX	AA28463;		
XX			
AC	25-MAR-2003 (revised)		
DT	09-DEC-1992 (first entry)		
XX			
DE	[psi18-9 pseudo] Nonapeptide bombesin antagonist (11).		
XX			
XX	Bombesin; GRP; gastrin releasing peptide.		
KW			
XX			
OS	Synthetic.		
XX			
XX			
PH	Key	Location/Qualifiers	
FT	Modified-site	1	/label= OTHER
FT			

```

FT FT /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT FT carboxylic acid, opt. in D-form"
FT FT /label= psi
FT FT /note= "residues 8-9 are linked via a pseudo peptide
FT FT bond"
FT FT Modified-site
FT FT 9
FT FT /label= OTHER
FT FT /note= "Tpi-OMe, Tpi= 2,3,4,9 tetrahydro-1 H- pyrido-[3,4
FT FT -b]-indole-3-carboxylic acid, residues 8-9 are linked via
FT FT a pseudo peptide bond"
XX XX W09209626-A1.
XX XX 11-JUN-1992.
XX XX
XX XX 15-NOV-1991; 91WO-US008534.
XX XX
XX XX 29-NOV-1990; 90US-00619747.
XX XX
XX XX (TULIA ) TULANE EDUCATIONAL FUND.
XX XX
XX XX Schally AV, Cai RZ;
XX XX WPI; 1992-217019/26.
XX XX
XX XX New nona:peptide bombesin antagonists - used for treating
XX XX hypergastrinemic states, such as pernicious anaemia and Zollinger-
XX XX Ellison syndrome and also used against lung and gastric cancer, etc.
XX XX
XX XX Disclosure; Page 9; 50pp; English.
XX XX
XX XX The C-terminal is amidated. The peptide is an example of a highly generic
XX XX formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
XX XX contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
XX XX pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
XX XX The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
XX XX is useful for treatment of states of hypergastrinemia, e.g. pernicious
XX XX anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
XX XX vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
XX XX -like cells, and with an increased risk of developing multifocal gastric
XX XX carcinoid tumours. The peptide can also be used to treat lung, colon and
XX XX gastric cancers. Dosage is 1- 1000 microg/Kg parenterally. (Updated on
XX XX 25-MAR-2003 to correct PN field.)
XX XX
XX XX Sequence 9 AA:
XX XX
XX XX Query Match 100.0%; Score 25; DB 2; Length 9;
XX XX Best Local Similarity 62.5%; Pred. No. 1.4e+06;
XX XX Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
XX XX
XX XX QY 1 XQXXVXHL 8
XX XX |:::|
XX XX Db 1 XQWAVGHL 8
XX XX
XX XX RESULT 91
XX XX AAR24487
XX XX ID AAR24487 standard; protein; 9 AA.
XX XX
XX XX AAR24487;
XX XX
XX XX 25-MAR-2003 (revised)
XX XX DT 09-DEC-1992 (first entry)
XX XX
XX XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (5) .
XX XX
XX XX Bombesin; GRP; gastrin releasing peptide.
XX XX
XX XX Synthetic.
XX XX
XX XX Key Location/Qualifiers
XX XX Modified-site 1

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FT FT /label= OTHER
FT FT /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT FT carboxylic acid in D-form"
FT FT /label= psi
FT FT /note= "residues 8-9 are linked via a pseudo peptide
FT FT bond"
FT FT Modified-site
FT FT 9
FT FT /label= psi
FT FT /note= "residues 8-9 are linked via a pseudo peptide
FT FT bond"
XX XX W09209626-A1.
XX XX 11-JUN-1992.
XX XX
XX XX 15-NOV-1991; 91WO-US008534.
XX XX
XX XX 29-NOV-1990; 90US-00619747.
XX XX
XX XX (TULIA ) TULANE EDUCATIONAL FUND.
XX XX
XX XX Schally AV, Cai RZ;
XX XX WPI; 1992-217019/26.
XX XX
XX XX New nona:peptide bombesin antagonists - used for treating
XX XX hypergastrinemic states, such as pernicious anaemia and Zollinger-
XX XX Ellison syndrome and also used against lung and gastric cancer, etc.
XX XX
XX XX Claim 3; Page 41; 50pp; English.
XX XX
XX XX The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
XX XX releasing peptide) antagonist and is useful for treatment of states of
XX XX hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
XX XX Zollinger-Ellison syndrome and vitiligo, associated with diffuse
XX XX hyperplasia of gastric enterochromaffin-like cells, and with an increased
XX XX risk of developing multifocal gastric carcinoid tumours. The peptide can
XX XX also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
XX XX microg/Kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX XX
XX XX Sequence 9 AA:
XX XX
XX XX Query Match 100.0%; Score 25; DB 2; Length 9;
XX XX Best Local Similarity 62.5%; Pred. No. 1.4e+06;
XX XX Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
XX XX
XX XX QY 1 XQXXVXHL 8
XX XX |:::|
XX XX Db 1 XQWAVGHL 8
XX XX
XX XX RESULT 92
XX XX AAR24484
XX XX ID AAR24484 standard; protein; 9 AA.
XX XX
XX XX AAR24484;
XX XX
XX XX 25-MAR-2003 (revised)
XX XX DT 09-DEC-1992 (first entry)
XX XX
XX XX [psi8-9 pseudo] Nonapeptide bombesin antagonist (2) .
XX XX
XX XX Bombesin; GRP; gastrin releasing peptide.
XX XX
XX XX Synthetic.
XX XX
XX XX Key Location/Qualifiers
XX XX Misc-difference 1
XX XX FT /note= "D-form residue"
XX XX FT Modified-site 8
XX XX FT /label= psi
XX XX FT /note= "residues 8-9 are linked via a pseudo peptide

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PR		10-MAY-1991;	91US-00698681.
XX		(BIOM-) BIOMEASURE INC.	
PA		(TULA) TULANE EDUCATIONAL FUND.	
XX			
PI		Bodgen AE, Coy DH, Kim SH, Moreau J;	
DR		WPI; 1992-415466/50.	
XX			
PT		Treatment of hepatoma - by admin. of admixed bombesin analogue with	
PT		carrier.	
XX			
PS		Claim 6; Page 42; 54pp; English.	
CC		The peptide is an example of a highly generic formula. It is used in a	
CC		medicament for treating hepatoma. The cpd. acts as antagonist to	
CC		bombesin, which has been detected in a number of human cancer lines.	
CC		(Updated on 25-MAR-2003 to correct PN field.)	
XX			
SQ		Sequence 9 AA;	
	Query Match	100.0%; Score 25; DB 2; Length 9;	
	Best Local Similarity	50.0%; Pred. No. 1.4e+06;	
Matches	4; Conservativé	4; Mismatches 0; Indels 0; Gaps 0;	
OY		1 XQXVXHL 8	
		: : : : :	
Db		1 FQMVGHL 8	
RESULT 94			
AAR29151			
ID		AAR29151 standard; peptide; 9 AA.	
XX			
AC		AAR29151;	
XX			
DT		25-MAR-2003 (revised)	
DT		16-APR-1993 (first entry)	
XX			
DE		Bombesin analogue (1).	
XX			
KM		Hepatoma; liver cancer; antagonist.	
XX			
OS		Synthetic.	
FH			
FT		Key location/Qualifiers	
FT		Misc-difference 1 /note= "D-form residue"	
FT		Modified-site 9 /note= "C-terminal is amidated"	
XX			
PN		WO9220363-A1.	
XX			
PD		26-NOV-1992.	
XX			
PF		11-MAY-1992; 92WO-US003916.	
XX			
PR		10-MAY-1991; 91US-00698681.	
XX			
PA		(BIOM-) BIOMEASURE INC.	
PA		(TULA) TULANE EDUCATIONAL FUND.	
XX			
PI		Bodgen AE, Coy DH, Kim SH, Moreau J;	
XX			
XX		WPI; 1992-415466/50.	
DR			
XX			
PT		Treatment of hepatoma - by admin. of admixed bombesin analogue with	
PT		carrier.	
XX			
PS		Claim 5; Page 42; 54pp; English.	
CC		The peptide is an example of a highly generic formula. It is used in a	
CC		medicament for treating hepatoma. The cpd. acts as antagonist to	
CC		medicament for treating hepatoma. The cpd. acts as antagonist to	

CC bombesin, which has been detected in a number of human cancer lines.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
:|::|:|
Db 1 FQWAVGHL 8

RESULT 95
AAR29154
ID AAR29154 standard; peptide; 9 AA.

XX AAR29154;
XX 25-MAR-2003 (revised)
DT 16-APR-1993 (first entry)
XX

DE Bombesin analogue (4).
XX Hepatoma; liver cancer; antagonist.
XX Synthetic.

OS
XX Key Location/Qualifiers
FH Misc-difference 1 /note= "D-form residue"
FT Modified-site 8 /note= "CO -> CH2"
FT Modified-site 9 /note= "p-Cl-Phe; C-terminal is amidated"

FT
XX W09220363-A1.
PN 26-NOV-1992.
PD
XX 11-MAY-1992; 92WO-US003916.
PF
XX 10-MAY-1991; 91US-00698681.
PR
XX (BIOM-) BIOMEASURE INC.
PA (TULA) TULANE EDUCATIONAL FUND.

PA
XX (TULA) TULANE EDUCATIONAL FUND.
PI
XX BoDgen AE, Coy DH, Kim SH, Moreau J;
PI WPI; 1992-415466/50.

DR WPI; 1992-415466/50.
XX
XX Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT carrier.
XX
XX Claim 11; Page 48; 54pp; English.

XX The peptide is an example of a highly generic formula. It is used in a
CC medicament for treating hepatoma. The cpd. acts as antagonist to
CC bombesin, which has been detected in a number of human cancer lines.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX

SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
:|::|:|
Db 1 FQWAVGHL 8

RESULT 96
AAR29153
ID AAR29153 standard; peptide; 9 AA.

XX AAR29153;
XX 25-MAR-2003 (revised)
DT 16-APR-1993 (first entry)
XX

DE Bombesin analogue (3).
XX Hepatoma; liver cancer; antagonist.
XX Synthetic.

OS
XX Key Location/Qualifiers
FH Modified-site 1 /note= "p-Cl-Phe in D-form"
FT Modified-site 8 /note= "CO -> CH2"
FT Modified-site 9 /note= "C-terminal is amidated"

FT
XX W09220363-A1.
PN 26-NOV-1992.
PD
XX 11-MAY-1992; 92WO-US003916.
PF
XX 10-MAY-1991; 91US-00698681.
PR

XX (BIOM-) BIOMEASURE INC.
PA (TULA) TULANE EDUCATIONAL FUND.
PI
XX BoDgen AE, Coy DH, Kim SH, Moreau J;
PI WPI; 1992-415466/50.

DR WPI; 1992-415466/50.
XX
XX Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT carrier.

XX Claim 11; Page 48; 54pp; English.
XX The peptide is an example of a highly generic formula. It is used in a
CC medicament for treating hepatoma. The cpd. acts as antagonist to
CC bombesin, which has been detected in a number of human cancer lines.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX

SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
:|::|:|
Db 1 FQWAVGHL 8

RESULT 97
AAR43757
ID AAR43757 standard; peptide; 9 AA.

XX AAR43757;
XX 25-MAR-2003 (revised)
DT 19-MAY-1994 (first entry)
XX

DE MHC Class I allele HLA-A2.1 binding HPV18 E7 peptide.

XX Human papilloma virus; major histocompatibility complex; prevention;
KW treatment; virus-related diseases; T cell response; cervical; human;
KW carcinoma; adenoma; screening tools; diagnostics; diagnosis.

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XX OS Synthetic.
XX PN WO9322338-A1.
XX PD 11-NOV-1993.
XX PF 04-MAY-1993; 93WO-NL000093.
XX PR 05-MAY-1992; 92EP-00201252.
XX PR 10-DEC-1992; 92EP-00203870.
XX PR 01-FEB-1993; 93EP-00200243.
XX PR 05-MAR-1993; 93EP-00200621.
XX PA (UYLE-) RIJKSUNIV LEIDEN.
XX PI Kaat WM, Melief CWM, Sette AD, Sidney JC.
XX DR WPI; 1993-368718/46.
XX PT Peptide(s) derived from human papilloma virus - which bind to a human
XX PT major histocompatibility complex Class I molecule, used for prevention
XX PT and treatment of virus-related diseases.
XX PS Claim 6; Page 52; 64pp; English.
XX CC The sequence is that of a peptide, derived from the E7 protein of human
XX CC papilloma virus (HPV18) (residues 7-15), which is able to bind to human
XX CC MHC Class I allele HLA-A2.1. It is able to induce a T cell response
XX CC effective against HPV, in partic. a HLA class I-restricted CD8+ cytotoxic
XX CC T cell response. It can be used for prevention and treatment of cervical
XX CC carcinoma and/or adenoma and other HPV-related diseases. It can also be
XX CC used as a screening tool and in diagnostic applications. (Updated on 25-
XX CC MAR-2003 to correct PN field.)
XX SQ Sequence 9 AA;

Query March 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
   ||:::||
   2 LQDIVLHL 9

RESULT 98
AAR40901
ID AAR40901 standard; peptide; 9 AA.
XX AC AAR40901;
XX DT 25-MAR-2003 (revised)
XX DT 10-FEB-1994 (first entry)
XX DE Bombesin analogue #3.
XX XX Bombesin; analogue; antagonist; agonist; antimutotoxic; anti-secretory;
XX KW activity; digestion; food intake; tissue growth; lung; pancreas;
XX KW intestine; ulcer; cancer.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT Modified-site 1
XX FT /label= OTHER
XX FT /note= "Ac-D-Phe"
XX FT Modified-site 9
XX FT /label= OTHER
XX FT /note= "N(Et), delta z-Phe-Ome"
XX PN WO9316105-A1.

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PD 19-AUG-1993.
XX PF 07-JAN-1993; 93WO-US000183.
XX XX 07-FEB-1992; 92US-00833834.
XX PR 07-FEB-1992; 92US-00833834.
XX XX (RICH ) MERRELL DOW PHARM INC.
XX PA Edwards JV, Fanger BO.
XX PI WPI; 1993-272830/34.
XX DR Bombesin analogues conty. modified phenylalanine derivs. - used for
XX XX stimulating digestion, decreasing food intake and stimulating growth of
XX PT organ tissues.
XX PS Example 1; Page 40; 54pp; English.
XX CC The sequences given in AAR40899-908 are bombesin analogues. These
XX CC peptides were prepared by solid phase sequential or block synthesis.
XX CC These peptides act as bombesin antagonists or agonists and have
XX CC antimutotoxic and/or anti-secretory activity. They may be used for
XX CC stimulating digestion in patients, decreasing food intake in patients or
XX CC stimulating growth of organ tissue of lung, pancreatic or intestinal
XX CC origin in patients. They can be used for the treatment of
XX CC gastrointestinal and pancreatic ulcers and for the treatment of cancers.
XX CC (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 9 AA;

Query March 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
   ||:::||
   1 XQWAVGHL 8

RESULT 99
AAR40902
ID AAR40902 standard; peptide; 9 AA.
XX AC AAR40902;
XX DT 25-MAR-2003 (revised)
XX DT 10-FEB-1994 (first entry)
XX DE Bombesin analogue #4.
XX XX Bombesin; analogue; antagonist; agonist; antimutotoxic; anti-secretory;
XX KW activity; digestion; food intake; tissue growth; lung; pancreas;
XX KW intestine; ulcer; cancer.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT Modified-site 1
XX FT /label= OTHER
XX FT /note= "Ac-D-Phe"
XX FT Modified-site 9
XX FT /label= OTHER
XX FT /note= "Delta z-Phe-Ome"
XX PN WO9316105-A1.
XX PD 19-AUG-1993.
XX XX 07-JAN-1993; 93WO-US000183.
XX PR 07-JAN-1993; 93WO-US000183.
XX PR 07-FEB-1992; 92US-00833834.
XX XX (RICH ) MERRELL DOW PHARM INC.

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XX Edwards JV, Fanger BO;
XX WPI; 1993-272830/34.
XX Bombesin analogues contg. modified phenylalanine derivs. - used for
PT stimulating digestion, decreasing food intake and stimulating growth of
PT organ tissues.
XX Example 1; Page 40; 54pp; English.
XX The sequences given in AAR40899-908 are bombesin analogues. These
CC peptides were prepared by solid phase sequential or block synthesis.
CC These peptides act as bombesin antagonists or agonists and have
CC antimimetic and/or anti-secretory activity. They may be used for
CC stimulating digestion in patients, decreasing food intake in patients or
CC stimulating growth of organ tissue of lung, pancreatic or intestinal
CC origin in patients. They can be used for the treatment of
CC gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ Sequence 9 AA:
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHL 8
Db 1 XQWAVGHL 8
RESULT 100
AAR40903
ID AAR40903 standard; peptide; 9 AA.
XX
AC AAR40903;
XX
DT 25-MAR-2003 (revised)
DT 10-FEB-1994 (first entry)
XX
DE Bombesin analogue #5.
XX
XX Bombesin; analogue; antagonist; agonist; antimimetic; anti-secretory;
KM activity; digestion; food intake; tissue growth; lung; pancreas;
KM intestine; ulcer; cancer.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /label= OTHER
FT /note= "Ac-D-Phe"
FT Modified-site 6
FT /note= "D-form residue"
FT Modified-site 9
FT /label= OTHER
FT /note= "N(Me), delta z-Phe-OMe"
XX
XX W09316105-A1.
XX
XX 19-AUG-1993.
XX
XX 07-JAN-1993; 93WO-US000183.
XX
XX 07-FEB-1992; 92US-00833834.
XX
XX (RICH) MERRELL DOW PHARM INC.
XX
XX Edwards JV, Fanger BO;
XX
XX WPI; 1993-272830/34.
XX

PT Bombesin analogues contg. modified phenylalanine derivs. - used for
PT stimulating digestion, decreasing food intake and stimulating growth of
PT organ tissues.
XX Example 1; Page 41; 54pp; English.
XX The sequences given in AAR40899-908 are bombesin analogues. These
CC peptides were prepared by solid phase sequential or block synthesis.
CC These peptides act as bombesin antagonists or agonists and have
CC antimimetic and/or anti-secretory activity. They may be used for
CC stimulating digestion in patients, decreasing food intake in patients or
CC stimulating growth of organ tissue of lung, pancreatic or intestinal
CC origin in patients. They can be used for the treatment of
CC gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ Sequence 9 AA:
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHL 8
Db 1 XQWAVGHL 8
RESULT 101
AAR40907
ID AAR40907 standard; peptide; 9 AA.
XX
AC AAR40907;
XX
DT 25-MAR-2003 (revised)
DT 10-FEB-1994 (first entry)
XX
DE Bombesin analogue #9.
XX
XX Bombesin; analogue; antagonist; agonist; antimimetic; anti-secretory;
KM activity; digestion; food intake; tissue growth; lung; pancreas;
KM intestine; ulcer; cancer.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /label= OTHER
FT /note= "Glp"
XX
XX W09316105-A1.
XX
XX 19-AUG-1993.
XX
XX 07-JAN-1993; 93WO-US000183.
XX
XX 07-FEB-1992; 92US-00833834.
XX
XX (RICH) MERRELL DOW PHARM INC.
XX
XX Edwards JV, Fanger BO;
XX
XX WPI; 1993-272830/34.
XX
XX Bombesin analogues contg. modified phenylalanine derivs. - used for
PT stimulating digestion, decreasing food intake and stimulating growth of
PT organ tissues.
XX Example 1; Page 43; 54pp; English.
XX The sequences given in AAR40899-908 are bombesin analogues. These
CC peptides were prepared by solid phase sequential or block synthesis.
CC These peptides act as bombesin antagonists or agonists and have
CC antimimetic and/or anti-secretory activity. They may be used for

CC stimulating digestion in patients, decreasing food intake in patients or
CC stimulating growth of organ tissue of lung, pancreatic or intestinal
CC origin in patients. They can be used for the treatment of
CC gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;

Best Local Similarity 50.0%; Pred. No. 1.4e+06;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHL 8

Db 2 QGTAVGHL 9

RESULT 102

AA040900

ID AAR40900 standard; peptide; 9 AA.

XX AAR40900;

DT 25-MAR-2003 (revised)

DT 10-FEB-1994 (first entry)

XX Bombesin analogue #2.

XX Bombesin; analogue; antagonist; agonist; antimotile; anti-secretory;
KM activity; digestion; food intake; tissue growth; lung; pancreas;
KM intestine; ulcer; cancer.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1

FT /label= OTHER

FT /note= "Ac-D-Phe"

FT Modified-site 9

FT /label= OTHER

FT /note= "N(Me), delta z-Phe-Ome"

PN W09316105-A1.

PD 19-AUG-1993.

XX 07-JAN-1993; 93WO-US000183.

PR 07-FEB-1992; 92US-00833834.

XX (RICH) MERRELL DOW PHARM INC.

PI Edwards JV, Fanger BO;

DR WPI; 1993-272830/34.

XX Bombesin analogues contg. modified phenylalanine derivs. - used for
PT stimulating digestion, decreasing food intake and stimulating growth of
PT organ tissues.

XX Example 1; Page 39; 54pp; English.

XX The sequences given in AAR40899-908 are bombesin analogues. These
CC peptides were prepared by solid phase sequential or block synthesis.

CC These peptides act as bombesin antagonists or agonists and have

CC antimotile and/or anti-secretory activity. They may be used for

CC stimulating digestion in patients, decreasing food intake in patients or

CC origin in patients. They can be used for the treatment of

CC gastrointestinal and pancreatic ulcers and for the treatment of cancers.

CC (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHL 8

Db 1 XQWAVGHL 8

RESULT 103

AA040905

ID AAR40905 standard; peptide; 9 AA.

XX AAR40905;

DT 25-MAR-2003 (revised)

DT 10-FEB-1994 (first entry)

XX Bombesin analogue #7.

XX Bombesin; analogue; antagonist; agonist; antimotile; anti-secretory;
KM activity; digestion; food intake; tissue growth; lung; pancreas;
KM intestine; ulcer; cancer.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1

FT /label= OTHER

FT /note= "Gip"

FT Modified-site 9

FT /label= OTHER

FT /note= "Delta z-Phe-Ome"

PN W09316105-A1.

PD 19-AUG-1993.

XX 07-JAN-1993; 93WO-US000183.

PR 07-FEB-1992; 92US-00833834.

XX (RICH) MERRELL DOW PHARM INC.

PI Edwards JV, Fanger BO;

DR WPI; 1993-272830/34.

XX Bombesin analogues contg. modified phenylalanine derivs. - used for
PT stimulating digestion, decreasing food intake and stimulating growth of
PT organ tissues.

XX Example 1; Page 42; 54pp; English.

XX The sequences given in AAR40899-908 are bombesin analogues. These
CC peptides were prepared by solid phase sequential or block synthesis.

CC These peptides act as bombesin antagonists or agonists and have

CC antimotile and/or anti-secretory activity. They may be used for

CC stimulating digestion in patients, decreasing food intake in patients or

CC origin in patients. They can be used for the treatment of

CC gastrointestinal and pancreatic ulcers and for the treatment of cancers.

CC (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;

Best Local Similarity 62.5%; Pred. No. 1.4e+06;

Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHL 8

Db 1 XQWAVGHL 8

```

Db          1 XQWAVGHL 8

RESULT 104
AAR40906
ID AAR40906 standard; peptide; 9 AA.
XX
AC AAR40906;
XX
DT 25-MAR-2003 (revised)
DT 10-FEB-1994 (first entry)
XX
DE Bombesin analogue #8.
XX
KM Bombesin; analogue; antagonist; agonist; antimutotic; anti-secretory;
KM activity; digestion; food intake; tissue growth; lung; pancreas;
KM intestine; ulcer; cancer.
XX
OS Synthetic.
XX
FH Key
FT Modified-site 1 Location/Qualifiers
FT /label= OTHER
FT /note= "GIP"
FT Modified-site 9
FT /label= OTHER
FT /note= "N(CH3)delta 2-Phe-OMe"
XX
PN W09316105-A1.
XX
PD 19-AUG-1993.
XX
PF 07-JAN-1993; 93WO-US000183.
XX
PR 07-FEB-1992; 92US-00833834.
XX
PA (RICH ) MERRELL DOW PHARM INC.
XX
PI Edwards JV, Fanger BO;
XX
DR WPI; 1993-272830/34.
XX
PT Bombesin analogues contg. modified phenylalanine derivs. - used for
PT stimulating digestion, decreasing food intake and stimulating growth of
PT organ tissues.
XX
PS Example 1; Page 42; 54pp; English.
XX
CC The sequences given in AAR40899-908 are bombesin analogues. These
CC peptides were prepared by solid phase sequential or block synthesis.
CC These peptides act as bombesin antagonists or agonists and have
CC antimutotic and/or anti-secretory activity. They may be used for
CC stimulating digestion in patients, decreasing food intake in patients or
CC stimulating growth of organ tissue of lung, pancreatic or intestinal
CC origin in patients. They can be used for the treatment of
CC gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
   ||:::||
Db 1 XQWAVGHL 8

RESULT 105
AAR59105
ID AAR59105 standard; peptide; 9 AA.
XX

```

```

AC AAR59105;
XX
DT 27-AUG-2003 (revised)
DT 25-MAR-2003 (revised)
DT 02-MAY-1995 (first entry)
XX
DE Peptide fragment (1.0240) of HPV binds HLA-A2.1.
XX
KM antigen; epitope; immunogenic target protein; PSA; HBVC; HBVs; EBV; HIV1;
KM core antigen; surface antigen; pharmaceutical composition; in vivo;
KM ex vivo; therapeutic; diagnostic; MHC class I molecule;
KM major histocompatibility complex; HLA-A2.1; 9mer; 10mer; anchor;
KM human leukocyte antigen; HPV.
XX
OS Human papillomavirus type 18.
XX
PN W09420127-A1.
XX
PD 15-SEP-1994.
XX
PF 04-MAR-1994; 94WO-US002353.
XX
PR 05-MAR-1993; 93US-00027146.
PR 04-JUN-1993; 93US-00073205.
PR 29-NOV-1993; 93US-00159184.
XX
PA (CYTE-) CYTEL CORP.
XX
PI Grey HM, Sette A, Sidney J, Kast W;
XX
DR WPI; 1994-302678/37.
XX
PT Immunogenic peptide (s) having an HLA-A2.1 binding motif - used for
PT treatment or prophylaxis of cancer, virus infection or autoimmune
PT diseases.
XX
PS Example 5; Page 100; 138pp; English.
XX
CC AAR59104-264 are immunogenic 9mer peptides that contain a HLA-A2.1
CC binding motif. These peptides bind HLA-A2.1 and have a binding affinity
CC of at least 1% as compared to a reference peptide (AAR71293). AAR59105
CC has an IC50 of 0.76 and the sequence occurs at position 7 in the HPV E7
CC protein. The peptides of the invention can induce cytotoxic T lymphocytes
CC which can react with target cells. They can be used for the treatment or
CC prophylaxis of cancer, eg. prostate cancer or lymphoma, etc. (Updated on
CC 25-MAR-2003 to correct PN field.) (Updated on 27-AUG-2003 to correct OS
CC field.)
XX
SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
   ||:::||
Db 2 LQDVLVHL 9

RESULT 106
AAR69367
ID AAR69367 standard; peptide; 9 AA.
XX
AC AAR69367;
XX
DT 25-MAR-2003 (revised)
DT 09-JUL-1995 (first entry)
XX
DE Bombesin antagonist pseudopeptide.
XX
KM Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;
KM hypergastrinemia; pernicious anaemia; vitiligo; Zollinger-;
KM Ellison syndrome; chronic atrophic gastritis.
XX

```


FT	Modified-site	1	/label= OTHER
FT	FT	/note= "D- Tpi	where Tpi is 2,3,4,9-tetrahydro-1H-
FT	FT	pyrido[3,4-b]indole-3-carboxylic acid"	
FT	Modified-site	8..9	
FT	FT	/note= "reduced peptide bond (i.e. CH2NH) between these	
FT	FT	two residues, "	
FT	Modified-site	9	
FT	FT	/label= OTHER	
FT	FT	/note= "Tac-NH2, where Tac is Tac is thiazolidine-4-	
FT	FT	carboxylic acid"	
PN	MO9421674-A1.		
XX	29-SEP-1994.		
XX	07-MAR-1994;	94WO-US002511.	
XX	15-MAR-1993;	93US-00031325.	
XX	(TULA) TULANE EDUCATIONAL FUND.		
XX	Schally AV, Cai RZ;		
XX	WPI; 1994-316936/39.		
XX	New bombesin antagonist, peptide derivs. contg. reduced leucine residue		
XX	useful for treating cancer and states of hyper-gastrinaemia e.g.		
XX	pernicious anaemia.		
XX	Claim 8, 13; Page 77, 79; 85pp; English.		
XX	New bombesin antagonist pseudopeptides are disclosed which have a		
XX	thiazolidine carboxylic acid residue at the C-terminal and a reduced		
XX	peptide linkage (CH2NH instead of CONH) joining it to the preceding leu		
XX	residue. In some cases the Tac residue can be replaced by Cys or Pen. The		
XX	present sequence is a specifically claimed example of the pseudopeptides.		
XX	The peptides are useful for treating lung, colonic and gastric cancers		
XX	and hypergastrinaemic conditions such as pernicious anaemia, chronic		
XX	atrophic gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on		
XX	25-MAR-2003 to correct PN field.)		
XX	Sequence 9 AA;		
XX	Query Match	100.0%; Score 25; DB 2; Length 9;	
XX	Best Local Similarity	62.5%; Pred. No. 1.4e+06;	
XX	Matches	5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;	
Qy	1 XQXXVXHL 8		
Db	1 XQMAVGH 8		
XX	RESULT 108		
XX	AA69369		
XX	AA69369 standard; peptide; 9 AA.		
XX	AA69369;		
XX	25-MAR-2003 (revised)		
XX	09-JUL-1995 (first entry)		
XX	Bombesin antagonist pseudopeptide.		
XX	Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;		
XX	hypergastrinaemia; pernicious anaemia; vitiligo; Zollinger-;		
XX	Ellison syndrome; chronic atrophic gastritis.		
XX	Synthetic.		
XX	Key	Location/Qualifiers	
XX	Misc-difference 1	/label= OTHER	

```

FT FT /note= "L- or D-3-(3-pyridyl)alanine; L- or D-TpI where
FT FT Tpl is 2,3,4,9-tetrahydro-1H-pyrido- [3,4-b]indole-3-
FT FT carboxylic acid; or Hca where Hca is des-amino-Phe (i.e.
FT FT cinnamic acid)"
FT FT Modified-site
FT FT /note= "reduced peptide bond (i.e. CH2NH) between these
FT FT two residues, "
FT FT Modified-site
FT FT /note= "Cys-NH2"
FT FT
FT FT W09421674-A1.
FT FT
FT FT 29-SEP-1994.
FT FT
FT FT 07-MAR-1994; 94WO-US002511.
FT FT
FT FT 15-MAR-1993; 93US-00031325.
FT FT
FT FT (TULA ) TULANE EDUCATIONAL FUND.
FT FT
FT FT Schally AV, Cai RZ;
FT FT
FT FT WPI; 1994-316936/39.
FT FT
FT FT New bombesin antagonist peptide derivs. contg. reduced leucine residue -
FT FT useful for treating cancer and states of hyper-gastrinaemia e.g.
FT FT pernicious anaemia.
FT FT
FT FT Example 5; Page 37; 85pp; English.
FT FT
FT FT New bombesin antagonist pseudopeptides are disclosed which have a
FT FT thiazolidine carboxylic acid residue at the C-terminal and a reduced
FT FT peptide linkage (CH2NH instead of CONH) joining it to the preceding Leu
FT FT residue. In some cases the Tac residue can be replaced by Cys or Pen. The
FT FT present sequence is a specific example of the pseudopeptides. The
FT FT peptides are useful for treating lung, colonic and gastric cancers and
FT FT hypergastrinaemic conditions such as pernicious anaemia, chronic atrophic
FT FT gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on 25-MAR-
FT FT 2003 to correct PN field.)
FT FT
FT FT Sequence 9 AA;
FT FT
FT FT Query Match 100.0%; Score 25; DB 2; Length 9;
FT FT Best Local Similarity 62.5%; Pred. No. 1.4e+06;
FT FT Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
FT FT
FT FT QY 1 XQXXVXHL 8
FT FT |:::|
FT FT 1 XQWAVGHL 8
FT FT
FT FT
FT FT RESULT 109
FT FT AAR69365
FT FT ID AAR69365 standard; peptide; 9 AA.
FT FT
FT FT AC AAR69365;
FT FT
FT FT 25-MAR-2003 (revised)
FT FT DT 09-JUL-1995 (first entry)
FT FT
FT FT Bombesin antagonist pseudopeptide.
FT FT DE
FT FT Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;
FT FT KM hypergastrinaemia; pernicious anaemia; vitiligo; Zollinger-;
FT FT KM Ellison syndrome; chronic atrophic gastritis.
FT FT
FT FT Synthetic.
FT FT
FT FT Key Location/Qualifiers
FT FT FT Misc-difference 1 /note= "D-Phe"
FT FT FT Modified-site 8..9
FT FT FT /note= "reduced peptide bond (i.e. CH2NH) between these
FT FT FT

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FT FT two residues, "
FT FT Modified-site
FT FT /label= OTHER
FT FT /note= "Tac-NH2 or 5,5-dimethyl-Tac-NH2, where Tac is
FT FT thiazolidine-4-carboxylic acid"
FT FT
FT FT W09421674-A1.
FT FT
FT FT 29-SEP-1994.
FT FT
FT FT 07-MAR-1994; 94WO-US002511.
FT FT
FT FT 15-MAR-1993; 93US-00031325.
FT FT
FT FT (TULA ) TULANE EDUCATIONAL FUND.
FT FT
FT FT Schally AV, Cai RZ;
FT FT
FT FT WPI; 1994-316936/39.
FT FT
FT FT New bombesin antagonist peptide derivs. contg. reduced leucine residue -
FT FT useful for treating cancer and states of hyper-gastrinaemia e.g.
FT FT pernicious anaemia.
FT FT
FT FT Claim 7, 9; Page 76, 77; 85pp; English.
FT FT
FT FT New bombesin antagonist pseudopeptides are disclosed which have a
FT FT thiazolidine carboxylic acid residue at the C-terminal and a reduced
FT FT peptide linkage (CH2NH instead of CONH) joining it to the preceding Leu
FT FT residue. In some cases the Tac residue can be replaced by Cys or Pen. The
FT FT present sequence is a specifically claimed example of the pseudopeptides.
FT FT The peptides are useful for treating lung, colonic and gastric cancers
FT FT and hypergastrinaemic conditions such as pernicious anaemia, chronic
FT FT atrophic gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on
FT FT 25-MAR-2003 to correct PN field.)
FT FT
FT FT Sequence 9 AA;
FT FT
FT FT Query Match 100.0%; Score 25; DB 2; Length 9;
FT FT Best Local Similarity 50.0%; Pred. No. 1.4e+06;
FT FT Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
FT FT
FT FT QY 1 XQXXVXHL 8
FT FT |:::|
FT FT 1 FQWAVGHL 8
FT FT
FT FT
FT FT RESULT 110
FT FT AAR69368
FT FT ID AAR69368 standard; peptide; 9 AA.
FT FT
FT FT AC AAR69368;
FT FT
FT FT 25-MAR-2003 (revised)
FT FT DT 09-JUL-1995 (first entry)
FT FT
FT FT Bombesin antagonist pseudopeptide.
FT FT DE
FT FT Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;
FT FT KM hypergastrinaemia; pernicious anaemia; vitiligo; Zollinger-;
FT FT KM Ellison syndrome; chronic atrophic gastritis.
FT FT
FT FT Synthetic.
FT FT
FT FT Key Location/Qualifiers
FT FT FT Misc-difference 1 /note= "D-Tip"
FT FT FT Modified-site 8..9
FT FT FT /note= "reduced peptide bond (i.e. CH2NH) between these
FT FT FT two residues, "
FT FT FT /label= OTHER
FT FT FT /note= "Tac-NH2, where Tac is Tac is thiazolidine-4-

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FT carboxylic acid"
 XX
 PN W09421674-A1.
 XX
 PD 29-SEP-1994.
 XX
 XX 07-MAR-1994; 94WO-US002511.
 XX
 PR 15-MAR-1993; 93US-00031325.
 XX
 PA (TULA) TULANE EDUCATIONAL FUND.
 XX
 PI Schally AV, Cai RZ;
 XX
 DR WPI; 1994-316936/39.
 XX
 PT New bombesin antagonist peptide derive, contg. reduced leucine residue -
 PT useful for treating cancer and states of hyper-gastrinaemia e.g.
 PT pernicious anaemia.
 XX
 PS Disclosure; Page 13; 85pp; English.
 XX
 CC New bombesin antagonist pseudopeptides are disclosed which have a
 CC thiazolidine carboxylic acid residue at the C-terminal and a reduced
 CC peptide linkage (CH2NH instead of CONH) joining it to the preceding Leu
 CC residue. In some cases the Tac residue can be replaced by Cys or Pen. The
 CC present sequence is a specific example of the pseudopeptides. The
 CC peptides are useful for treating lung, colonic and gastric cancers and
 CC hypergastrinaemic conditions such as pernicious anaemia, chronic atrophic
 CC gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on 25-MAR-
 CC 2003 to correct PN field.)
 XX
 SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 : : : : :
 Db 1 QWMAVGH 8

RESULT 111
 AAR47619
 ID AAR47619 standard; peptide; 9 AA.
 XX
 AC AAR47619;
 XX
 DT 25-MAR-2003 (revised)
 DT 26-JUL-1994 (first entry)
 XX
 DE Bombesin-like peptide analogue.
 XX
 KM Acrosome reaction; fertilisation.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1 /label= pglu
 FT Misc-difference 8. .9
 FT /note= "reduced peptide bond between the two"
 FT Modified-site 9 /note= "amidated"
 FT
 XX
 PN W09402018-A1.
 XX
 PD 03-FEB-1994.
 XX
 PF 27-JUL-1993; 93WO-US007044.
 XX
 PR 27-JUL-1992; 92US-00919731.
 XX
 PT

PR 23-MAR-1993; 93US-00039778.
 XX
 PA (MEDI-) MEDICAL RES FOUND OREGON.
 XX
 PI Spindel ER, Vijayaraghavan S, Nagalla SR, Li K;
 XX
 DR WPI; 1994-048427/06.
 XX
 PT New bombesin-like acrosome-related peptides - used to promote the
 PT acrosome reaction to promote fertilisation or to develop antagonists to
 PT inhibit fertilisation.
 XX
 PS Disclosure; Page 54; 68pp; English.
 XX
 CC The peptide is a bombesin-like peptide which is capable of promoting the
 CC acrosome reaction to promote fertilisation. Bombesin antagonists can be
 CC used to inhibit fertilisation. See also AAR47609-20. (Updated on 25-MAR-
 CC 2003 to correct PN field.)
 XX
 SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 : : : : :
 Db 1 QWMAVGH 8

RESULT 112
 AAR69564
 ID AAR69564 standard; peptide; 9 AA.
 XX
 AC AAR69564;
 XX
 DT 25-MAR-2003 (revised)
 DT 11-SEP-1995 (first entry)
 XX
 DE [D-Tp16, Leu13-pai-Leu14]-Bombesin(6-14).
 XX
 KM Bombesin; antagonist; AIDS; acquired immune deficiency syndrome;
 KM AIDS-related complex; immunostimulant.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1 /label= OTHER
 FT /note= "D-2,3,4,9-tetrahydro-1H-pyrido[3,4-b]- indole-3-
 FT carboxylic acid"
 FT Modified-site 8. .9
 FT /note= "pseudopeptide bond"
 FT Modified-site 8 /label= OTHER
 FT /note= "reduced Leu isostere"
 FT
 XX
 PN W09500168-A1.
 XX
 PD 05-JAN-1995.
 XX
 PF 02-APR-1994; 94WO-EP001037.
 XX
 PR 18-JUN-1993; 93DE-04320201.
 XX
 PA (ASTA) ASTA MEDICA AG.
 XX
 PI Engel J, Kutscher B, Bernd M, Niemeyer U;
 XX
 DR WPI; 1995-051750/07.
 XX
 PT Medicament for AIDS and ARC control and as immunostimulant - contains new
 PT and known IHRH and bombesin peptide antagonists.
 PT

XX
PS Claim 9; Page 25; 33pp; German.
XX
CC This is a specifically claimed example of a highly generic formula for
CC bombesin antagonists. Such peptides are particularly useful for treatment
CC of AIDS and AIDS-related complex. The peptides act as immunostimulants
CC and have low toxicity compared to AZT. (Updated on 25-MAR-2003 to correct
CC PN field.)
XX
SQ Sequence 9 AA;
XX
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
Qy 1 XXXVXHL 8
Db 1 XQWAVGHL 8
XX
RESULT 113
AA01936
ID AA01936 standard; peptide; 9 AA.
XX
AC AA01936;
XX
DT 25-MAR-2003 (revised)
DT 01-JUL-1999 (first entry)
XX
DE Peptide analogue of bombesin.
XX
KW Somatostatin analogue; peptide derivative; treatment; acromegaly;
KW pancreatitis; trauma induced proliferation; diabetes; cancer;
KW diabetic retinopathy; restenosis; angioplasty; AIDS; arteritis;
KW neurogenic inflammation; gastrointestinal probelen; diarrhoea;
KW bombesin analogue.
XX
OS Synthetic.
XX
PN US552520-A.
XX
PD 03-SEP-1996.
XX
PF 09-AUG-1994; 94US-00287957.
XX
PR 09-AUG-1993; 93US-00104194.
XX
PA (BIOM-) BIOMEASURE INC.
XX
PI Kim SH, Dong ZX, Taylor J, Keyes SR, Moreau S;
XX
DR WPI; 1996-412130/41.
XX
PT New modified peptide, e.g. somatostatin, derivs. - have enhanced
PT biological activity compared with the corresp. unmodified peptide deriv.
XX
PS Example 5; Col 19-20; 45pp; English.
XX
CC The present sequence represents a bombesin analogue. The specification
CC describes somatostatin analogues (AA01821-935) which are used as the
CC peptide moiety in the peptide derivatives of the invention. These peptide
CC derivatives contain one or more substituents separately linked by an
CC amide, amino, or sulphonamide bond to an amino group either on the N-
CC terminal end or side chain of a peptide moiety. The peptide derivatives
CC have more potent and prolonged biological activity compared with the
CC corresponding unmodified peptide. In particular, somatostatin derivatives
CC are used to treat diseases susceptible to treatment by the corresponding
CC unmodified peptides, e.g. somatostatin derivatives are useful for
CC treating cancer, acromegaly, pancreatitis, trauma induced proliferation,
CC diabetes, diabetic retinopathy, restenosis following angioplasty, AIDS,
CC neurogenic inflammation, arteritis and gastrointestinal problems, e.g.
CC diarrhoea. (Updated on 25-MAR-2003 to correct PF field.)

XX
SQ Sequence 9 AA;
XX
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
Qy 1 XXXVXHL 8
Db 1 XQWAVGHL 8
XX
RESULT 114
AA00310
ID AA00310 standard; peptide; 9 AA.
XX
AC AA00310;
XX
DT 10-JUN-1997 (first entry)
XX
DE Bombesin analogue #5.
XX
KW Bombesin analogue; tumour; inhibition; smooth-muscle proliferation;
KW suppression; appetite; pancreatic secretion; alcohol craving; amphibian;
KW mammal; gastrin-releasing peptide; GRP; neuromedin B; NMB; neuromedin C;
KW NMC; litorin.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 6 /label= bala
FT Modified-site 9 /label= Nle
FT /note= "Amidated C-terminal"
XX
PN AU9514808-A.
XX
PD 26-SEP-1996.
XX
PF 13-MAR-1995; 95AU-00014808.
XX
PR 13-MAR-1995; 95AU-00014808.
XX
PA (BIOM-) BIOMEASURE INC.
XX
PI Kim SH, Moreau J;
XX
DR WPI; 1996-455920/46.
XX
PT New bombesin peptide analogues - for treating cancer, inhibiting smooth-
PT muscle proliferation, etc.
XX
PS Claim 16; Page 17; 22pp; English.
XX
CC The sequence given in AA00306-10 are bombesin analogues which are useful
CC for treating tumours, inhibiting smooth-muscle proliferation, suppressing
CC appetite, stimulating pancreatic secretion and suppressing craving for
CC alcohol. These peptides are based on the amphibian peptide bombesin which
CC is closely related to the mammalian homologue gastrin-releasing peptide
CC (GRP), neuromedin B (NMB), neuromedin C (NMC) and litorin
XX
SQ Sequence 9 AA;
XX
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
Qy 1 XXXVXHL 8
Db 1 FQWAVXHL 8

```

RESULT 115
AAW00307
ID AAW00307 standard; peptide; 9 AA.
XX
XX AAW00307;
AC
XX
XX 10-JUN-1997 (first entry)
DT
XX
XX Bombesin analogue #2.
DE
XX
XX Bombesin analogue; tumour; inhibition; smooth-muscle proliferation;
KW suppression; appetite; pancreatic secretion; alcohol craving; amphibian;
KW mammal; gastrin-releasing peptide; GRP; neuromedin B; NMB; neuromedin C;
KW NMC; litorin.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH Misc-difference 1 /note= "D-form residue"
FT Modified-site 6 /label= bala
FT Modified-site 9 /note= "Amidated C-terminal"
FT
XX
XX AUN514808-A.
PN
XX
XX 26-SEP-1996.
PD
XX
XX 13-MAR-1995; 95AU-00014808.
PF
XX
XX 13-MAR-1995; 95AU-00014808.
PR
XX
XX (BIOM-) BIOMEASURE INC.
PA
XX
XX Kim SH, Moreau J;
PI
XX
XX WPI; 1996-455920/46.
DR
XX
XX New bombesin peptide analogues - for treating cancer, inhibiting smooth-
PT muscle proliferation, etc.
FT
XX
XX Claim 13; Page 17; 22pp; English.
PS
XX
XX The sequence given in AAW00306-10 are bombesin analogues which are useful
CC for treating tumours, inhibiting smooth-muscle proliferation, suppressing
CC appetite, stimulating pancreatic secretion and suppressing craving for
CC alcohol. These peptides are based on the amphibian peptide bombesin which
CC is closely related to the mammalian homologue gastrin-releasing peptide
CC (GRP), neuromedin B (NMB), neuromedin C (NMC) and litorin
CC
XX
XX Sequence 9 AA:
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
DB 1 FQWAVXHL 8

```

```

XX
XX T cell epitope; immune response; human leukocyte antigen; HLA Class I;
KW vaccine; immunogenic; major histocompatibility complex; MHC; B cell;
KW disease; anti-tumour; anti-viral.
XX
XX Human papillomavirus.
OS
XX
XX MO9741440-A1.
PN
XX
XX 06-NOV-1997.
PD
XX
XX 28-APR-1997; 97WO-NL000229.
PF
XX
XX 26-APR-1996; 96EP-00201145.
PR
XX
XX 23-DEC-1996; 96EP-00203670.
XX
XX (UYLE-) RICKSUNIV LEIDEN.
PA (SCIS-) SCI SEED CAPITAL INVESTMENTS BV.
XX
XX Van Der Burg SH, Kast WM, Toes REM, Offerings R, Mellef CJM;
PI
XX
XX WPI; 1997-549891/50.
DR
XX
XX Method of selecting T cell peptide epitope(s) - by measuring the
PT stability of HLA class I-peptide complexes on intact B cells.
FT
XX
XX Example 3; Page 79; 109pp; English.
PS
XX
XX Peptides AAW39430-W39734 are used in a novel method for the selection of
CC immunogenic T-cell peptide epitopes present in polypeptide antigens. The
CC method involves the identification of peptide sequences capable of
CC binding to an HLA (human leukocyte antigen) class I molecule and
CC measuring the binding of this epitope peptide to the HLA class I peptide.
CC The stability of binding of the peptide and MHC (major histocompatibility
CC complex) class I molecule is measured on intact human B cells carrying
CC the MHC molecule at their cell surfaces. The method can be used to select
CC peptide epitopes for generating vaccines against a disease associated
CC with the polypeptide, i.e.9. cancers or AIDS. The peptide epitopes are
CC especially T-cell peptide epitopes with strong anti-tumour and anti-viral
CC immune responses. Peptide AAW39675 is derived from the human
CC papillomavirus type 18 E7 protein and is capable of binding to the human
CC MHC Class I allele HLA-A2.1
CC
XX
XX Sequence 9 AA:
SQ
Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
DB 2 LQDIVLHL 9

```

```

RESULT 117
AAW51201
ID AAW51201 standard; peptide; 9 AA.
XX
XX AAW51201;
AC
XX
XX 07-AUG-1998 (first entry)
DT
XX
XX Peptide derived from litorin or bombesin useful for treating cancer.
DE
XX
XX Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW gastrin-releasing peptide.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH Misc-difference 1 /note= "D-form residue"
FT

```

```

FT Misc-difference 6 /note= "D-form residue"
FT Modified-site 9 /label= N1e
FT /note= "C-terminal amide"
FT
XX US5767236-A.
XX
XX 16-JUN-1998.
XX
XX 13-FEB-1995; 95US-00387634.
XX
XX 09-MAY-1990; 90US-00520226.
XX 13-AUG-1992; 92US-00929306.
XX
XX (BIOM-) BIOMESURE INC.
XX
XX Moreau J, Kim SH;
XX WPI; 1998-361783/31.
XX
XX New linear peptide compounds derived from, litorin or bombesin - are
XX useful, e.g., for treating cancer, suppressing appetite or stimulating
XX pancreatic secretion.
XX
XX Claim 16; Col 14; 11pp; English.
XX
XX The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
XX A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
XX (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
XX ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
XX -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
XX Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
XX (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
XX beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
XX alpha-aminobutyric acid, Trp, beta-Nal, Phe or p-X-Phe; A9 = Met, Met-
XX oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
XX alkyl, 7-10C phenylalkyl or COEt; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
XX alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
XX R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
XX 12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
XX provided that when one of R1 or R2 is COEt, then the other is H. The
XX peptides are derived from litorin, neuromedin B, neuromedin C, bombesin
XX (the last 10 amino acids) and human GRP (last 10 amino acids). They may
XX be used for treating cancer, for preventing proliferation of smooth
XX muscle, for suppressing appetite, for stimulating pancreatic secretion or
XX for suppressing cravings for alcohol. The present sequence represents a
XX specifically claimed peptide
XX
XX Sequence 9 AA;
XX
XX Query Match 100.0%; Score 25; DB 2; Length 9;
XX Best Local Similarity 50.0%; Pred. No. 1.4e+06;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 XQXXVXHL 8
XX :|::|::|
XX Db 1 FQWAVHL 8
XX
XX RESULT 118
XX AAW51206
XX ID AAW51206 standard; peptide; 9 AA.
XX
XX AAW51206;
XX
XX 07-AUG-1998 (first entry)
XX
XX Peptide derived from litorin or bombesin useful for treating cancer.
XX
XX Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
XX pancreatic secretion; neuromedin B; neuromedin C; GRP;
XX gastrin-releasing peptide.
XX

```

```

XX
XX Synthetic.
XX OS
XX Key Location/Qualifiers
XX FT Misc-difference 1 /note= "D-form residue"
XX FT Modified-site 9 /note= "C-terminal amide"
XX FT
XX US5767236-A.
XX
XX 16-JUN-1998.
XX
XX 13-FEB-1995; 95US-00387634.
XX
XX 09-MAY-1990; 90US-00520226.
XX 13-AUG-1992; 92US-00929306.
XX
XX (BIOM-) BIOMESURE INC.
XX
XX Moreau J, Kim SH;
XX WPI; 1998-361783/31.
XX
XX New linear peptide compounds derived from, litorin or bombesin - are
XX useful, e.g., for treating cancer, suppressing appetite or stimulating
XX pancreatic secretion.
XX
XX Claim 21; Col 14; 11pp; English.
XX
XX The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
XX A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
XX (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
XX ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
XX -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
XX Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
XX (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
XX beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
XX alpha-aminobutyric acid, Trp, beta-Nal, Phe or p-X-Phe; A9 = Met, Met-
XX oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
XX alkyl, 7-10C phenylalkyl or COEt; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
XX alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
XX R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
XX 12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
XX provided that when one of R1 or R2 is COEt, then the other is H. The
XX peptides are derived from litorin, neuromedin B, neuromedin C, bombesin
XX (the last 10 amino acids) and human GRP (last 10 amino acids). They may
XX be used for treating cancer, for preventing proliferation of smooth
XX muscle, for suppressing appetite, for stimulating pancreatic secretion or
XX for suppressing cravings for alcohol. The present sequence represents a
XX specifically claimed peptide
XX
XX Sequence 9 AA;
XX
XX Query Match 100.0%; Score 25; DB 2; Length 9;
XX Best Local Similarity 50.0%; Pred. No. 1.4e+06;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 XQXXVXHL 8
XX :|::|::|
XX Db 1 YQWAVGHL 8
XX
XX RESULT 119
XX AAW51195
XX ID AAW51195 standard; peptide; 9 AA.
XX
XX AAW51195;
XX
XX 07-AUG-1998 (first entry)
XX
XX Peptide derived from litorin or bombesin useful for treating cancer.
XX

```

KM Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
 KM pancreatic secretion; neuromedin B; neuromedin C; GRP;
 KM gastrin-releasing peptide.
 OS Synthetic.
 FT Key Location/Qualifiers
 FT Modified-site 1
 FT Modified-site /note= "D-form residue"
 FT Modified-site 9
 FT /note= "C-terminal amide"
 PN US5767236-A.
 PD 16-JUN-1998.
 XX 13-FEB-1995; 95US-00387634.
 XX 09-MAY-1990; 90US-00520226.
 PR 13-AUG-1992; 92US-00929306.
 XX (BIOM-) BIOMEASURE INC.
 PA Moreau J, Kim SH;
 PI WPI; 1998-361783/31.
 DR New linear peptide compounds derived from, litorin or bombesin - are
 PT useful, e.g., for treating cancer, suppressing appetite or stimulating
 PT pancreatic secretion.
 XX
 PS Claim 9; Col 13; 11pp; English.
 CC The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
 CC A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
 CC (3-(beta-naphthyl)-alanine), Phe or P-X-Phe; X = Cl, F, Br, NO2, OH or Me
 CC ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or P-X-
 CC -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
 CC Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
 CC (sarcosine), P-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
 CC beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
 CC alpha-aminobutyric acid, Trp, beta-Nal, Phe or P-X-Phe; A9 = Met, Met-
 CC oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
 CC alkyl, 7-10C phenylalkyl or COEt; EI = 1-20C alkyl, 3-20C alkenyl, 3-20C
 CC alkenyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
 CC R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
 CC 12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
 CC provided that when one of R1 or R2 is COEt, then the other is H. The
 CC peptides are derived from litorin, neuromedin B, neuromedin C, bombesin
 CC (the last 10 amino acids) and human GRP (last 10 amino acids). They may
 CC be used for treating cancer, for preventing proliferation of smooth
 CC muscle, for suppressing appetite, for stimulating pancreatic secretion or
 CC for suppressing cravings for alcohol. The present sequence represents a
 CC specifically claimed peptide
 XX
 SQ Sequence 9 AA:
 Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 QXXXVXHL 8
 Db 1 FQWAVVHL 8
 RESULT 120
 AAW51193
 ID AAW51193 standard; peptide; 9 AA.
 AC AAW51193;
 XX
 XX 07-AUG-1998 (first entry)

XX Peptide derived from litorin or bombesin useful for treating cancer.
 DE Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
 XX pancreatic secretion; neuromedin B; neuromedin C; GRP;
 KM gastrin-releasing peptide.
 OS Synthetic.
 FT Key Location/Qualifiers
 FT Modified-site 1
 FT Modified-site /note= "D-form residue, optionally D-p-chlorophenyl-
 FT Modified-site 9
 FT Modified-site /note= "C-terminal amide"
 PN US5767236-A.
 PD 16-JUN-1998.
 XX 13-FEB-1995; 95US-00387634.
 XX 09-MAY-1990; 90US-00520226.
 PR 13-AUG-1992; 92US-00929306.
 XX (BIOM-) BIOMEASURE INC.
 PA Moreau J, Kim SH;
 PI WPI; 1998-361783/31.
 DR New linear peptide compounds derived from, litorin or bombesin - are
 PT useful, e.g., for treating cancer, suppressing appetite or stimulating
 PT pancreatic secretion.
 XX
 PS Claim 5; Col 13; 11pp; English.
 CC The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
 CC A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
 CC (3-(beta-naphthyl)-alanine), Phe or P-X-Phe; X = Cl, F, Br, NO2, OH or Me
 CC ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or P-X-
 CC -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
 CC Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
 CC (sarcosine), P-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
 CC beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
 CC alpha-aminobutyric acid, Trp, beta-Nal, Phe or P-X-Phe; A9 = Met, Met-
 CC oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
 CC alkyl, 7-10C phenylalkyl or COEt; EI = 1-20C alkyl, 3-20C alkenyl, 3-20C
 CC alkenyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
 CC R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
 CC 12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
 CC provided that when one of R1 or R2 is COEt, then the other is H. The
 CC peptides are derived from litorin, neuromedin B, neuromedin C, bombesin
 CC (the last 10 amino acids) and human GRP (last 10 amino acids). They may
 CC be used for treating cancer, for preventing proliferation of smooth
 CC muscle, for suppressing appetite, for stimulating pancreatic secretion or
 CC for suppressing cravings for alcohol. The present sequence represents a
 CC specifically claimed peptide
 XX
 SQ Sequence 9 AA:
 Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 QXXXVXHL 8
 Db 1 FQWAVVHL 8
 RESULT 121
 AAW51200
 ID AAW51200 standard; peptide; 9 AA.

```

XX AC AAW51200;
XX 07-AUG-1998 (first entry)
XX
XX DE Peptide derived from litorin or bombesin useful for treating cancer.
XX
XX KM Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
XX KM pancreatic secretion; neuromedin B; neuromedin C; GRP;
XX KM gastrin-releasing peptide.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FH Misc-difference 1 /note= "D-form residue"
XX FT Modified-site 9 /label= Nle
XX FT /note= "C-terminal amide"
XX
XX PN US5767236-A.
XX
XX PD 16-JUN-1998.
XX
XX PE 13-FEB-1995; 95US-00387634.
XX
XX PR 09-MAY-1990; 90US-00520226.
XX PR 13-AUG-1992; 92US-00929306.
XX
XX PA (BIOM-) BIOMEASURE INC.
XX
XX PI Moreau J, Kim SH;
XX
XX DR WPI; 1998-361783/31.
XX
XX PT New linear peptide compounds derived from, litorin or bombesin - are
XX PT useful, e.g., for treating cancer, suppressing appetite or stimulating
XX PT pancreatic secretion.
XX
XX PS Claim 15; Col 14; 11pp; English.
XX
XX CC The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
XX CC A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
XX CC (3-(beta-naphthyl)-alanine), Phe or P-X-Phe; X = Cl, F, Br, NO2, OH or Me
XX CC ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or P-X
XX CC -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
XX CC Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
XX CC (sarcosine), P-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
XX CC beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
XX CC alpha-aminobutyric acid, Trp, beta-Nal, Phe or P-X-Phe; A9 = Met, Met-
XX CC oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
XX CC alkyl, 7-10C phenylalkyl or COEt; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
XX CC alkenyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
XX CC R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
XX CC 12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
XX CC provided that when one of R1 or R2 is COEt, then the other is H. The
XX CC peptides are derived from litorin, neuromedin B, neuromedin C, bombesin
XX CC (the last 10 amino acids) and human GRP (last 10 amino acids). They may
XX CC be used for treating cancer, for preventing proliferation of smooth
XX CC muscle, for suppressing appetite, for stimulating pancreatic secretion or
XX CC for suppressing cravings for alcohol. The present sequence represents a
XX CC specifically claimed peptide
XX
XX SQ Sequence 9 AA;

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```

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 XXXVXVXHL 8
Db 1 FQWAVGHL 8

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RESULT 122
AAW51207
XX ID AAW51207 standard; peptide; 9 AA.
XX
XX AC AAW51207;
XX
XX DT 07-AUG-1998 (first entry)
XX
XX DE Peptide derived from litorin or bombesin useful for treating cancer.
XX
XX KM Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
XX KM pancreatic secretion; neuromedin B; neuromedin C; GRP;
XX KM gastrin-releasing peptide.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FH Misc-difference 1 /note= "D-form residue"
XX FT Modified-site 9 /note= "C-terminal amide"
XX FT /note= "C-terminal amide"
XX
XX PN US5767236-A.
XX
XX PD 16-JUN-1998.
XX
XX PE 13-FEB-1995; 95US-00387634.
XX
XX PR 09-MAY-1990; 90US-00520226.
XX PR 13-AUG-1992; 92US-00929306.
XX
XX PA (BIOM-) BIOMEASURE INC.
XX
XX PI Moreau J, Kim SH;
XX
XX DR WPI; 1998-361783/31.
XX
XX PT New linear peptide compounds derived from, litorin or bombesin - are
XX PT useful, e.g., for treating cancer, suppressing appetite or stimulating
XX PT pancreatic secretion.
XX
XX PS Claim 22; Col 14; 11pp; English.
XX
XX CC The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
XX CC A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
XX CC (3-(beta-naphthyl)-alanine), Phe or P-X-Phe; X = Cl, F, Br, NO2, OH or Me
XX CC ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or P-X
XX CC -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
XX CC Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
XX CC (sarcosine), P-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
XX CC beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
XX CC alpha-aminobutyric acid, Trp, beta-Nal, Phe or P-X-Phe; A9 = Met, Met-
XX CC oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
XX CC alkyl, 7-10C phenylalkyl or COEt; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
XX CC alkenyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
XX CC R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
XX CC 12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
XX CC provided that when one of R1 or R2 is COEt, then the other is H. The
XX CC peptides are derived from litorin, neuromedin B, neuromedin C, bombesin
XX CC (the last 10 amino acids) and human GRP (last 10 amino acids). They may
XX CC be used for treating cancer, for preventing proliferation of smooth
XX CC muscle, for suppressing appetite, for stimulating pancreatic secretion or
XX CC for suppressing cravings for alcohol. The present sequence represents a
XX CC specifically claimed peptide
XX
XX SQ Sequence 9 AA;

```

```

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 XXXVXVXHL 8

```


AC	AAMS11194;	
XX		
DT	07-AUG-1998	(first entry)
XX		
DE	Peptide derived from litorin or bombesin useful for treating cancer.	
XX		
KW	Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;	
KW	pancreatic secretion; neuromedin B; neuromedin C; GRP;	
KW	gastrin-releasing peptide.	
XX		
OS	Synthetic.	
XX		
FH	Key	Location/Qualifiers
FT	Modified-site	1
FT		/note= "D-form residue, optionally D-p-chlorophenyl-
FT		alanine"
FT	Modified-site	9
FT		/note= "C-terminal amide"
XX		
PN	US5767236-A.	
XX		
PD	16-JUN-1998.	
XX		
PF	13-FEB-1995;	95US-00387634.
XX		
PR	09-MAY-1990;	90US-00520226.
XX		
PR	13-AUG-1992;	92US-00929306.
XX		
PA	(BIOM-) BIOMEASURE INC.	
XX		
PI	Moreau J, Kim SH;	
XX		
DR	WPI, 1998-361783/31.	
XX		
PT	New linear peptide compounds derived from, litorin or bombesin - are	
PT	useful, e.g., for treating cancer, suppressing appetite or stimulating	
PT	pancreatic secretion.	
XX		
PS	Claim 6; Col 13; 11pp; English.	
XX		
CC	The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal	
CC	(3-(beta-naphthyl)-alanine), Phe or p-X-Phe, X = Cl, F, Br, NO2, OH or Me	
CC	; A2 = Gly, A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X-	
CC	-Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,	
CC	Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Ser	
CC	(sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or	
CC	beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,	
CC	alpha-aminobutyric acid, Trp, beta-Nal, Phe or p-X-Phe; A9 = Met, Met-	
CC	oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C	
CC	alkyl, 7-10C phenylalkyl or COB; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C	
CC	alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;	
CC	R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-	
CC	12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;	
CC	provided that when one of R1 or R2 is COB, then the other is H. The	
CC	peptides are derived from litorin, neuromedin B, neuromedin C, bombesin	
CC	(the last 10 amino acids) and human GRP (last 10 amino acids). They may	
CC	be used for treating cancer, for preventing proliferation of smooth	
CC	muscle, for suppressing appetite, for stimulating pancreatic secretion or	
CC	for suppressing cravings for alcohol. The present sequence represents a	
XX	specifically claimed peptide	
XX	Sequence 9 AA:	

```

Query Match Similarity      100.0%; Score 25; DB 2; Length 9;
Best Local Similarity      50.0%; Pred. No 1.4e+06;
Matches      4; Conservative      4; Mismatches      0; Indels      0;
QY      1 XQXXVXHL 8
      : : : : | |
Db      1 FQMAVGHLL 8

```

```

RESULT 126
AAW54742 standard; peptide; 9 AA.
XX
AC AAW54742;
XX
DT 25-SEP-1998 (first entry)
XX
DE Peptide from HPV 18 E7 (7-15).
XX
KW Mannose; antigen; antigen-presenting cell; mannosylated peptide; T cell;
XX vaccine; treatment.
XX
OS Synthetic.
XX
PN WO9813378-A1.
XX
PD 02-APR-1998.
XX
PF 25-SEP-1997; 97WO-NL000536.
XX
PR 26-SEP-1996; 96EP-00202701.
XX
PA (UYLE-) RIJKSUNIV LEIDEN.
XX
PI Koning F, Drijfhout JW;
XX
DR WPI, 1998-230631/20.
XX
PT Increasing uptake and presentation of antigen(s) - by adding mannose
PT residue(s) to antigen for increasing T cell response, useful in, e.g.
PT vaccines against viral infection(s).
XX
PS Disclosure; Page 36; 47pp; English.
XX
CC The peptides AAW54559-W54809 are examples of peptides to which at least 1
CC (preferably 2) mannose can be attached to increase their uptake as
CC antigens by antigen-presenting cells. Uptake of agonist mannosylated
CC peptides will increase the T cell response, whereas uptake of antagonist
CC peptides blocks the T cell response. Blocking binding of immunogenic
CC autoantigens can be used in treatment of type I diabetes, rheumatoid
CC arthritis, graft rejection etc., also to induce T-cell non-
CC responsiveness. Vaccines containing mannosylated antigen are used to
CC prevent or treat infections by, e.g. bacteria, viruses, fungi, helminths
CC and parasites
CC
SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0

Oy 1 XQXXVXHL 8
:|:|:|
2 LQDIYVHL 9

RESULT 127
AAV17045
ID AAV17045 standard; peptide; 9 AA.
XX
AC AAV17045;
XX
DT 20-JUL-1999 (first entry)
XX
DE HPV antigenic peptide.
XX
KW Conjugate peptide; heat shock protein; hsp; phage display library; virus;
KW surface protein; tethering peptide; chaperone process; cytokine; cancer;
KW neoplastic disease; infectious disease; bacterium; immune system; fungus;
KW acquired immune deficiency; autoimmune disease.
XX
OS Synthetic.

```

XX MO9922761-A1.
 XX 14-MAY-1999.
 XX 22-OCT-1998; 98WO-US022335.
 XX 31-OCT-1997; 97US-00961707.
 XX (SLOAN) SLOAN KETTERING INST CANCER RES.
 XX ROCHMAN JE, Mayhew M, Hoe MH, Houghton A, Hartl U, Querfelldl O,
 XX Moroi Y,
 XX WPI: 1999-313177/26.
 XX Identifying peptides which bind heat shock proteins.
 XX Example; Page 30; 155pp; English.
 XX The invention relates to conjugate peptides engineered to noncovalently
 CC bind to heat shock proteins (hsp). A method of identifying a hsp binding
 CC peptide comprises (a) contacting a phage display library having
 CC bacteriophage expressing, in a surface protein, inserted peptides with a
 CC hsp target, and bound to a benzoguinone anisamycin antibiotic (BNA), in a
 CC physiologic binding buffer; (b) isolating a phage binding to the hsp
 CC target; and (c) identifying the inserted peptide expressed. The peptides
 CC which bind to a hsp can be used as tethering peptides for a hsp which may
 CC serve as an accessory in a chaperone process and/or may comprise a
 CC cytokine. They can also be coupled to antigens to induce an immune
 CC response. Such compositions can be used for treating neoplastic disease,
 CC e.g. cancers, infectious diseases, e.g. diseases caused by a bacterium,
 CC virus, protozoan, mycoplasma, fungus, yeast, parasite or prion, or a
 CC disease of the immune system, e.g. acquired immune deficiencies or
 CC autoimmune diseases
 XX Sequence 9 AA:
 SQ
 Query Match 100.0%; Score 25; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 QXXXVXHL 8
 Db 2 LQDIVLHL 9
 RESULT 128
 AA92738
 ID AA92738 standard; peptide; 9 AA.
 XX
 AC AA92738;
 XX
 DT 20-MAR-2003 (revised)
 DT 30-APR-1999 (first entry)
 XX
 DB Bombesin peptide analogue #4.
 XX
 KW Bombesin; gastrin releasing peptide; GRP; GRP; litorin; proliferation;
 KW growth hormone releasing factor; treatment; benign; malignant; tissue;
 KW small-cell lung carcinoma; atherosclerosis; gastrointestinal disorder;
 KW diabetes; diabetes related retinopathy.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT Modified-site 1 /note= "Residue is pyroglutamate"
 FT Misc-difference 8..9 /note= "This sequence has a non-peptidyl bond (i.e.
 FT CH2NH), rather than a peptidyl (i.e. CO/NH) between the
 FT Modified-site 9 Leu and Leu residues"

FT /note= "C-terminal amide"
 XX US587277-A.
 XX 02-MAR-1999.
 XX 10-NOV-1994; 94US-00337127.
 XX 24-SEP-1987; 87US-00100571.
 XX 25-MAR-1988; 88US-00173311.
 XX 08-JUN-1988; 88US-00204171.
 XX 16-JUN-1988; 88US-00207759.
 XX 23-SEP-1988; 88US-00248771.
 XX 14-OCT-1988; 88US-00257998.
 XX 09-DEC-1988; 88US-00282328.
 XX 02-MAR-1989; 89US-00317941.
 XX 07-JUL-1989; 89US-00376555.
 XX 21-AUG-1989; 89US-00397169.
 XX 30-MAR-1990; 90US-00502438.
 XX 18-OCT-1991; 91US-00779039.
 XX (TULIA) TULANE EDUCATIONAL FUND.
 XX (BIOM - BIOMESURE INC.
 XX Kim SH, Coy DH, Moreau J;
 XX WPI: 1999-189718/16.
 XX New peptides - useful for treating benign or malignant tissue
 FT proliferation, gastrointestinal disorders and diabetes.
 PS Disclosure: Col 29-30; 22pp; English.
 XX This invention describes novel peptides which are analogues of litorin or
 CC the 10 amino acid carboxy-terminal region of mammalian gastrin releasing
 CC peptide or the 10 amino acid carboxy-terminal region of amphibian
 CC bombesin of formula (R1) (R2)A1-A2-Trip-A4-A5-A6-A7-W where A1 = D-isomer
 CC of p-X-Phe, Trip or beta-Nal; X = F, Cl, Br, NO2, OH, H or Me; A2 = Gly,
 CC Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trip, Cys, beta-Nal, His, 1-
 CC methyl-His or 3-methyl-His; A4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle,
 CC alpha-aminobutyric acid, Met, p-X-Phe, Trip, Cys or beta-Nal; A5 = Gln,
 CC Asn, Gly, Ala, Leu, Ile, Nle, alpha-aminobutyric acid, Met, Val, p-X-Phe,
 CC Trip, Thr or beta-Nal; A6 = Ser, Gly or D-isomer of Ala, N-methyl-Ala,
 CC Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trip, Cys or beta-Nal; A7 = His or
 CC 1-methyl or 3-methyl-His; W = -N(R3)-CH(Z1)-R4-CH(Z2)-C(=O)V; R4 = CH2NH
 CC ; Z1, Z2 = Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe,
 CC Trip, Cys, Met, Pro, Hyp or cyclohexylala; V = OR5 or NR6R7; R3, R5, R6,
 CC R7 = H, lower alkyl, phenyl(lower alkyl) or naphthyl(lower alkyl); R1, R2
 CC = H, 112C alkyl, 7-10C phenylalkyl or COEt; where R1 and R2 are bonded to
 CC the N-terminal amine acid of the peptide; R1 = 1-20C alkyl, 3-20C
 CC alkenyl, 3-20C alkynyl, Ph, naphthyl or 7-10C phenylalkyl; provided that
 CC when 1 of R1 and R2 is COEt, the other must be H. The peptides can be
 CC used for treating benign or malignant proliferation of tissue e.g. small-
 CC cell lung carcinoma, atherosclerosis, gastrointestinal disorders, and
 CC diabetes or diabetes related retinopathy. AA92735-W92742 represent
 CC bombesin peptide analogues used in the method of the invention. (Updated
 CC on 20-MAR-2003 to correct PR field.)
 XX
 SQ Sequence 9 AA:
 Oy 1 QXXXVXHL 8
 Db 1 EQWAVGHL 8
 RESULT 129
 AA944955
 ID AA944955 standard; peptide; 9 AA.

AAV4955;
 23-MAY-2000 (first entry)
 Human papilloma virus antigenic peptide-3.
 Human papilloma virus antigenic peptide; target antigen;
 KDEL receptor inhibitor; heat shock protein; immune response;
 oligomerisation domain; neoplasia; sarcoma; lymphoma; leukaemia;
 melanoma; carcinoma; glioblastoma; astrocytoma; oncogene;
 infectious disease; allergy; autoimmune disease.
 Human papillomavirus.
 WO200006729-A1.
 10-FEB-2000.
 28-JUL-1999; 99WO-US017147.
 29-JUL-1998; 98US-00124671.
 (SLOK) SLOAN KETTERING INST CANCER RES.
 Roelman JE, Mayhew M, Hoe MH;
 WPI; 2000-195296/17.
 Inhibitors of the KDEL receptor which comprises an oligomerization domain
 useful for promoting secretion of proteins which are normally retained
 within the cell.
 Disclosure; Page 22; 87gp; English.
 The patent discloses the use of KDEL receptor inhibitor to promote
 secretion of proteins that are normally retained within the cell such as
 heat shock proteins by inhibiting KDEL receptor-mediated return of
 protein complexes to endoplasmic reticulum. This makes the secreted heat
 shock proteins more accessible to the immune system and improves immune
 response to a target antigen. The inhibitor protein comprises several
 subunits where each subunit comprises an oligomerisation domain and has
 at its carboxy terminus a region which binds to a KDEL receptor. The
 target antigen may be associated with diseases including neoplasia such
 as sarcoma, lymphoma, leukemia, melanoma, carcinoma, glioblastoma and
 astrocytoma, with defective tumour suppressor genes, oncogenes,
 infectious diseases, allergy or autoimmune diseases. The present sequence
 is human papillomavirus antigenic peptide. This serves as the target
 antigen for compositions comprising a KDEL receptor inhibitor. The target
 antigen forms a complex with a heat shock protein and the heat shock
 protein contains a ligand sequence which binds to a KDEL receptor
 Sequence 9 AA;
 Query Match 100.0%; Score 25; DB 3; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 1 XXXVXHL 8
 :|::|::|
 2 LQDIVLHL 9
 RESULT 130
 AAB96028
 ID AAB96028 standard; peptide; 9 AA.
 AAB96028;
 25-JUN-2001 (first entry)
 HPV 18 E7 A2 MHC-binding epitope SEQ ID 144.
 Epitope; tumour antigen; antiviral; immunostimulatory; cervical cancer;

human papillomavirus-associated disease; condyloma; cervical dysplasia;
 cervical dysplasia; major histocompatibility complex; MHC I.
 Human papillomavirus.
 WO200119408-A1.
 22-MAR-2001.
 18-SEP-2000; 2000WO-US025559.
 16-SEP-1999; 99US-00398534.
 16-SEP-1999; 99US-0154665P.
 09-DEC-1999; 99US-00458173.
 09-DEC-1999; 99US-0169846P.
 (ZYCO-) ZYCOS INC.
 Hedley ML, Urban RC, Chicx RM;
 WPI; 2001-265996/27.
 Novel nucleic acids encoding polypeptide polypeptides containing multiple
 epitopes from one or more proteins, useful for treating tumors and as
 vaccines against pathogenic agents.
 Disclosure; Page 23; 64pp; English.
 This invention relates to polynucleotides encoding a hybrid polypeptide
 comprising a signal sequence and three segments that are either
 contiguous or separated by a spacer amino acid or spacer peptide. The
 invention specifically details polynucleotides encoding a polypeptide
 peptide where the peptide segments are tumour antigens or a naturally
 occurring protein of a pathogenic agent. The polypeptide peptides exhibit
 antiviral and immunostimulatory activity. The polynucleotide and
 polypeptide peptides are useful for eliciting an immune response in a
 mammal. The polynucleotide and protein are useful as vaccines for
 treating tumours and pathogenic infections. The polynucleotide is also
 useful for preventing or treating human papillomavirus (HPV)-associated
 diseases, particularly exophytic condyloma, flat condyloma, cervical
 cancer, respiratory papilloma, conjunctival papilloma, genital-tract HPV
 infection, cervical dysplasia, high grade squamous intraepithelial
 lesions, and anal HPV infection. The polynucleotide and polypeptide are
 useful for generating or enhancing prophylactic or therapeutic immune
 response against pathogens, tumours or autoimmune diseases in a
 population of individuals having diverse MHC allotypes, as positive
 controls in T cell stimulation assays in vitro, and as tools to
 understand processing of epitopes within cells. Peptides AAB95894 -
 AAB96037 and AAB96044 - AAB96048 represent major histocompatibility
 complex I (MHC I) associated tumour and pathogen antigens. The peptides
 can be used as part of the polypeptide proteins of the invention. Also
 included are examples of the polypeptide proteins represented by AAB96050
 - AAB96052, and localisation signal peptides AAB96038 - AAB96043 and
 AAB96049 which can be used in the construction of the polypeptide
 peptides
 Sequence 9 AA;
 Query Match 100.0%; Score 25; DB 4; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 1 XXXVXHL 8
 :|::|::|
 2 LQDIVLHL 9
 RESULT 131
 ABB06668
 ID ABB06668 standard; peptide; 9 AA.
 ABB06668;
 Epitope; tumour antigen; antiviral; immunostimulatory; cervical cancer;

DT 10-JUN-2002 (first entry)
 XX Bombesin/gastrin-releasing peptide related peptide SEQ ID NO:7.
 XX
 DE Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; licoein;
 XX growth hormone releasing factor; cytostatic; antiarteriosclerotic;
 KW gastrin-releasing factor; cytostatic; antiarteriosclerotic;
 KW gastrin-releasing factor; cytostatic; antiarteriosclerotic;
 KW autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
 KW malignant proliferation; benign proliferation; pancreatic secretion;
 KW motility; amylase secretion suppression; appetite; muscular dystrophy;
 KW diabetes.
 XX
 OS Synthetic.
 XX
 FT Key Location/Qualifiers
 FT Modified-site 1
 FT Modified-site /note= "pyroglutamic-acid"
 FT Modified-site 8..9
 FT Modified-site /note= "non-peptidyl bond"
 FT Modified-site 9
 FT Modified-site /note= "amidated"
 FT
 XX US6307017-B1.
 XX
 PD 23-OCT-2001.
 XX
 PF 02-MAR-1999; 99US-00260846.
 XX
 XX 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 XX
 PA (BIOM-) BIOMEASURE INC.
 PA (TULA) TULANE EDUCATIONAL FUND.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX
 DR WPI; 2002-162970/21.
 XX
 PT New antagonistic analogs of licoein and similar peptides, are useful for
 XX treating malignant or benign proliferation or gastrointestinal disorders.
 PS
 XX Disclosure; Col 9; 29pp; English.

CC the exemplification of the present invention
 XX
 SQ Sequence 9 AA:
 XX
 Query Match 100.0%; Score 25; DB 5; Length 9;
 Best Local Similarity 50.0%; Pred. No. 1.4e+06;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 X0XXVXHL 8
 Db 1 EQMVGHL 8
 RESULT 132
 ADD70041
 ID ADD70041 standard; peptide; 9 AA.
 XX
 AC ADD70041;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 XX Bombesin/GRP-derived peptide #24.
 DE
 XX gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KW growth hormone releasing factor; GRF; licoein; neurotrophin C; cancer;
 KW small cell lung carcinoma; motility disorder;
 KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KW paracrine mitotic agent; arteriosclerosis; diabetic retinopathy.
 KW
 OS Synthetic.
 XX
 FT Key Location/Qualifiers
 FT Modified-site 1
 FT Modified-site /note= "D-form beta-Naphthylalanine"
 FT Modified-site 8..9
 FT Modified-site /note= "Non-peptide bond (psi[CH2NH])"
 FT Modified-site 9
 FT Modified-site /note= "Amidated"
 FT
 XX US2003050436-A1.
 XX
 PN 13-MAR-2003.
 XX
 PD 23-OCT-2001; 2001US-00004530.
 XX
 PF 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMEASURE INC.
 PA Coy DH, Moreau J, Kim SH;
 XX
 DR WPI; 2003-810756/76.
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 XX disorders, arteriosclerosis, cancer, diabetes related retinopathy and
 XX diabetes.
 PS
 XX Disclosure; Page 4; 23pp; English.

CC The invention relates to a new therapeutic peptide comprises 7-10 amino
CC acid residues. The peptide is an analogue of naturally occurring peptides
CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC formula detailed in the specification. The peptides are used for treating
CC cancer e.g. small cell lung carcinoma, motility disorders of the
CC gastrointestinal tract and symptomatic relief and/or treatment of
CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC patients, as autocrine or paracrine mitotic agent, and for treating
CC benign and malignant proliferation of tissue, gastrointestinal disorders,
CC atherosclerosis and diabetes and diabetic retinopathy. The present
CC sequence is a peptide of the invention.

XX
SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 7; Length 9;
Best Local Similarity 62.5%; Pred. No. 1,4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XXXXXHL 8
|:::|
Db 1 XQNAVGH 8

RESULT 133
ADD70005
ID ADD70005 standard; peptide; 9 AA.

XX
AC ADD70005;
DT 29-JAN-2004 (first entry)
XX
DE Bombesin/GRP-derived peptide #3.
XX
XX gastrointestinal disorder; diabetes; malignant proliferation;
KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KM small cell lung carcinoma; motility disorder;
KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
XX Synthetic.
OS
XX
FH Key location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 8..9 /note= "Non-peptide bond (psi[CH2NH])"
FT Modified-site 9 /note= "Amidated D-form Pha"
FT
PN US2003050436-A1.
XX
XX
PD 13-MAR-2003.
XX
PF 23-OCT-2001; 2001US-00004530.
XX
XX 24-SEP-1987; 87US-00100571.
PR 25-MAR-1988; 88US-00173311.
PR 08-JUN-1988; 88US-00204171.
PR 16-JUN-1988; 88US-00207759.
PR 23-SEP-1988; 88US-00248771.
PR 14-OCT-1988; 88US-00257998.
PR 09-DEC-1988; 88US-00282328.
PR 02-MAR-1989; 89US-00317941.
PR 07-JUL-1989; 89US-00376555.
PR 21-AUG-1989; 89US-00397169.
PR 30-MAR-1990; 90US-00502438.
PR 18-OCT-1991; 91US-00779039.
PR 10-NOV-1994; 94US-00337127.
PR 02-MAR-1999; 99US-00260846.
XX

PA (BIOM-) BIOMEASURE INC.
XX
XX Coy DH, Moreau J, Kim SH;
XX WPI; 2003-810756/76.
DR
XX New therapeutic peptide used for treating e.g. gastrointestinal
PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT diabetes.
XX
PS Disclosure; Page 4; 23pp; English.
XX
XX The invention relates to a new therapeutic peptide comprises 7-10 amino
XX acid residues. The peptide is an analogue of naturally occurring peptides
XX terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
XX gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
XX growth hormone releasing factor (GRF), litorin and neuromedin C) of
XX formula detailed in the specification. The peptides are used for treating
XX cancer e.g. small cell lung carcinoma, motility disorders of the
XX gastrointestinal tract and symptomatic relief and/or treatment of
XX exocrine pancreatic carcinoma and for restoration of appetite in cachexia
XX patients, as autocrine or paracrine mitotic agent, and for treating
XX benign and malignant proliferation of tissue, gastrointestinal disorders,
XX atherosclerosis and diabetes and diabetic retinopathy. The present
XX sequence is a peptide of the invention.

XX
SQ Sequence 9 AA;

Query Match 100.0%; Score 25; DB 7; Length 9;
Best Local Similarity 50.0%; Pred. No. 1,4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XXXXXHL 8
|:::|
Db 1 PQNAVGH 8

RESULT 134
ADD70008
ID ADD70008 standard; peptide; 9 AA.

XX
AC ADD70008;
DT 29-JAN-2004 (first entry)
XX
DE Bombesin/GRP-derived peptide #6.
XX
XX gastrointestinal disorder; diabetes; malignant proliferation;
KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KM small cell lung carcinoma; motility disorder;
KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
XX Synthetic.
OS
XX
FH Key location/Qualifiers
FT Misc-difference 1 /note= "D-form Cpa (not defined)"
FT Modified-site 8..9 /note= "Non-peptide bond (psi[CH2NH])"
FT Modified-site 9 /note= "Amidated"
FT
PN US2003050436-A1.
XX
XX
PD 13-MAR-2003.
XX
PF 23-OCT-2001; 2001US-00004530.
XX
XX 24-SEP-1987; 87US-00100571.
PR 25-MAR-1988; 88US-00173311.
PR 08-JUN-1988; 88US-00204171.
XX

PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMEASURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 DR WPI: 2003-810756/76.
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Disclosure; Page 4; 23pp; English.
 CC
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 9 AA;
 QY 1 QXXXVXHL 8
 Db 1 QXMAVGH 8
 RESULT 135
 ADD70028
 ID ADD70028 standard; peptide; 9 AA.
 AC ADD70028;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Bombesin/GRP-derived peptide #15.
 XX
 KW Gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KW growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
 KW small cell lung carcinoma; motility disorder;
 KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 1
 FT /note= "D-form residue"
 FT Modified-site 8..9
 FT /note= "Non-peptide bond (pep[CH2NH])"

FT Modified-site 9 /note= "Amidated"
 FT
 XX
 PN US2003050436-A1.
 XX
 PD 13-MAR-2003.
 XX
 PP 23-OCT-2001; 2001US-00004530.
 XX
 PR 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204711.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 PA (BIOM-) BIOMEASURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 DR WPI: 2003-810756/76.
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 PS Disclosure; Page 12; 23pp; English.
 CC
 CC The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is a peptide of the invention.
 XX
 SQ Sequence 9 AA;
 QY 1 QXXXVXHL 8
 Db 1 QXMAVGH 8
 RESULT 136
 ADD70011
 ID ADD70011 standard; peptide; 9 AA.
 AC ADD70011;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Bombesin/ litorin/GRP-derived peptide #4.
 XX
 KW Gastrointestinal disorder; diabetes; malignant proliferation;
 KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;

KM growth hormone releasing factor; GRP; litorin; neuromedin C; cancer;
KM small cell lung carcinoma; motility disorder;
KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 8..9 /note= "Non-peptide bond (psi[CH2NH])"
FT Modified-site 9 /note= "Amidated"
XX
PN US2003050436-A1.
XX
PD 13-MAR-2003.
XX
PF 23-OCT-2001; 2001US-00004530.
XX
PR 24-SEP-1987; 87US-00100571.
PR 25-MAR-1988; 88US-00173311.
PR 08-JUN-1988; 88US-00204171.
PR 16-JUN-1988; 88US-00207759.
PR 23-SEP-1988; 88US-00248771.
PR 14-OCT-1988; 88US-00257998.
PR 09-DEC-1988; 88US-00282328.
PR 02-MAR-1989; 89US-00317941.
PR 07-JUL-1989; 89US-00376555.
PR 21-AUG-1989; 89US-00397169.
PR 30-MAR-1990; 90US-00502438.
PR 18-OCT-1991; 91US-00779039.
PR 10-NOV-1994; 94US-00337127.
PR 02-MAR-1999; 99US-00260846.
XX
PA (BIOM-) BIOMEASURE INC.
XX
PI Coy DH, Moreau J, Kim SH;
XX
DR WPI; 2003-810756/76.
XX
PT New therapeutic peptide used for treating e.g. gastrointestinal
PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT diabetes.
XX
PS Disclosure; Page 5; 23pp; English.
XX
CC The invention relates to a new therapeutic peptide comprises 7-10 amino
CC acid residues. The peptide is an analogue of naturally occurring peptides
CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC formula detailed in the specification. The peptides are used for treating
CC cancer e.g. small cell lung carcinoma, motility disorders of the
CC gastrointestinal tract and symptomatic relief and/or treatment of
CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC patients, as autocrine or paracrine mitotic agent, and for treating
CC benign and malignant proliferation of tissue, gastrointestinal disorders,
CC atherosclerosis and diabetes and diabetic retinopathy. The present
CC sequence is a peptide of the invention.
XX
SQ Sequence 9 AA;
XX
Query Match 100.0%; Score 25; DB 7; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XXXXXVHL 8
|:::|
Db 1 FQMAVGH 8

RESULT 137
ADD70023
ID ADD70023 standard; peptide; 9 AA.
XX
AC ADD70023;
XX
DT 29-JAN-2004 (first entry)
XX
DB Bombesin/GRP-derived peptide #10.
XX
KM gastrointestinal disorder; diabetes; malignant proliferation;
KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KM small cell lung carcinoma; motility disorder;
KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1 /note= "Pyro-Glu"
FT Modified-site 8..9 /note= "Non-peptide bond (psi[CH2NH])"
FT Modified-site 9 /note= "Amidated"
XX
PN US2003050436-A1.
XX
PD 13-MAR-2003.
XX
PF 23-OCT-2001; 2001US-00004530.
XX
PR 24-SEP-1987; 87US-00100571.
PR 25-MAR-1988; 88US-00173311.
PR 08-JUN-1988; 88US-00204171.
PR 16-JUN-1988; 88US-00207759.
PR 23-SEP-1988; 88US-00248771.
PR 14-OCT-1988; 88US-00257998.
PR 09-DEC-1988; 88US-00282328.
PR 02-MAR-1989; 89US-00317941.
PR 07-JUL-1989; 89US-00376555.
PR 21-AUG-1989; 89US-00397169.
PR 30-MAR-1990; 90US-00502438.
PR 18-OCT-1991; 91US-00779039.
PR 10-NOV-1994; 94US-00337127.
PR 02-MAR-1999; 99US-00260846.
XX
PA (BIOM-) BIOMEASURE INC.
XX
PI Coy DH, Moreau J, Kim SH;
XX
DR WPI; 2003-810756/76.
XX
PT New therapeutic peptide used for treating e.g. gastrointestinal
PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT diabetes.
XX
PS Disclosure; Page 12; 23pp; English.
XX
CC The invention relates to a new therapeutic peptide comprises 7-10 amino
CC acid residues. The peptide is an analogue of naturally occurring peptides
CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC formula detailed in the specification. The peptides are used for treating
CC cancer e.g. small cell lung carcinoma, motility disorders of the
CC gastrointestinal tract and symptomatic relief and/or treatment of
CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC patients, as autocrine or paracrine mitotic agent, and for treating
CC benign and malignant proliferation of tissue, gastrointestinal disorders,
CC atherosclerosis and diabetes and diabetic retinopathy. The present
CC sequence is a peptide of the invention.

XX SQ Sequence 9 AA; 100.0%; Score 25; DB 7; Length 9;
Query Match 50.0%; Pred. No. 1.4e+06;
Best Local Similarity 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Matches 4; Conservative 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
1 EOMAVGHL 8
Db 1 EOMAVGHL 8

RESULT 138
ADD70010
ID ADD70010 standard; peptide; 9 AA.
XX AC ADD70010;
XX DT 29-JAN-2004 (first entry)
XX DE Bombesin/ litorin/GRP-derived peptide #2.
XX KW gastrointestinal disorder; diabetes; malignant proliferation;
KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW small cell lung carcinoma; motility disorder;
KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX OS Synthetic.
XX FH Key location/Qualifiers
FT Modified-site 1 /note= "Pyro-Glu"
FT Modified-site 8. .9 /note= "Non-peptide bond (psi[CH2NH])"
FT Modified-site 9 /note= "Amidated"
FT US2003050436-A1.
XX PN 13-MAR-2003.
XX PD 23-OCT-2001; 2001US-00004530.
XX PF 24-SEP-1987; 87US-00100571.
XX PR 25-MAR-1988; 88US-00173311.
XX PR 08-JUN-1988; 88US-00204171.
XX PR 16-JUN-1988; 88US-00207759.
XX PR 23-SEP-1988; 88US-00248771.
XX PR 14-OCT-1988; 88US-00257998.
XX PR 09-DEC-1988; 88US-00282328.
XX PR 02-MAR-1989; 89US-00317941.
XX PR 07-JUL-1989; 89US-00376555.
XX PR 21-AUG-1989; 89US-00397169.
XX PR 30-MAR-1990; 90US-00502438.
XX PR 18-OCT-1991; 91US-00779039.
XX PR 10-NOV-1994; 94US-00337127.
XX PR 02-MAR-1999; 99US-00260846.
XX PA (BIOM-) BIOMEASURE INC.
XX PI Coy DH, Morneau J, Kim SH;
XX DR WPI; 2003-810756/76.
XX PT New therapeutic peptide used for treating e.g. gastrointestinal
XX disorders, atherosclerosis, cancer, diabetes related retinopathy and
XX diabetes.
XX PS Disclosure; Page 5; 23pp; English.
XX CC The invention relates to a new therapeutic peptide comprises 7-10 amino

CC acid residues. The peptide is an analogue of naturally occurring peptides
CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC formula detailed in the specification. The peptides are used for treating
CC cancer e.g. small cell lung carcinoma, motility disorders of the
CC gastrointestinal tract and symptomatic relief and/or treatment of
CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC patients, as autocrine or paracrine mitotic agent, and for treating
CC benign and malignant proliferation of tissue, gastrointestinal disorders,
CC atherosclerosis and diabetes and diabetic retinopathy. The present
CC sequence is a peptide of the invention.
XX SQ Sequence 9 AA; 100.0%; Score 25; DB 7; Length 9;
Query Match 50.0%; Pred. No. 1.4e+06;
Best Local Similarity 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Matches 4; Conservative 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
1 EOMAVGHL 8
Db 1 EOMAVGHL 8

RESULT 139
ADD70032
ID ADD70032 standard; peptide; 9 AA.
XX AC ADD70032;
XX DT 29-JAN-2004 (first entry)
XX DE Bombesin/GRP-derived peptide #19.
XX KW gastrointestinal disorder; diabetes; malignant proliferation;
KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW small cell lung carcinoma; motility disorder;
KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX OS Synthetic.
XX FH Key location/Qualifiers
FT Modified-site 1 /note= "D-form Naphthylalanine"
FT Modified-site 8. .9 /note= "Non-peptide bond (psi[CH2NH])"
FT Modified-site 9 /note= "Amidated"
FT US2003050436-A1.
XX PN 13-MAR-2003.
XX PD 23-OCT-2001; 2001US-00004530.
XX PF 24-SEP-1987; 87US-00100571.
XX PR 25-MAR-1988; 88US-00173311.
XX PR 08-JUN-1988; 88US-00204171.
XX PR 16-JUN-1988; 88US-00207759.
XX PR 23-SEP-1988; 88US-00248771.
XX PR 14-OCT-1988; 88US-00257998.
XX PR 09-DEC-1988; 88US-00282328.
XX PR 02-MAR-1989; 89US-00317941.
XX PR 07-JUL-1989; 89US-00376555.
XX PR 21-AUG-1989; 89US-00397169.
XX PR 30-MAR-1990; 90US-00502438.
XX PR 18-OCT-1991; 91US-00779039.
XX PR 10-NOV-1994; 94US-00337127.
XX PR 02-MAR-1999; 99US-00260846.
XX PA (BIOM-) BIOMEASURE INC.

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XX COY DH, Moreau J, Kim SH;
XX WPI; 2003-810756/76.
XX
XX New therapeutic peptide used for treating e.g. gastrointestinal
XX disorders, atherosclerosis, cancer, diabetes related retinopathy and
XX diabetes.
XX
XX Disclosure; Page 12; 23pp; English.
XX
XX The invention relates to a new therapeutic peptide comprises 7-10 amino
XX acid residues. The peptide is an analogue of naturally occurring peptides
XX terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
XX gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
XX growth hormone releasing factor (GRF), litorin and neuromedin C) of
XX formula detailed in the specification. The peptides are used for treating
XX cancer e.g. small cell lung carcinoma, motility disorders of the
XX gastrointestinal tract and symptomatic relief and/or treatment of
XX exocrine pancreatic carcinoma and for restoration of appetite in cachexia.
XX patients, as autocrine or paracrine mitotic agent, and for treating
XX benign and malignant proliferation of tissue, gastrointestinal disorders,
XX atherosclerosis and diabetes and diabetic retinopathy. The present
XX sequence is a peptide of the invention.
XX
SQ Sequence 9 AA;
XX
Query Match 100.0%; Score 25; DB 7; Length 9;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 XXXXVXHL 8
   |:::|
Db 1 XQWAVGHL 8

RESULT 140
ADD70021
ID ADD70021 standard; peptide; 9 AA.
XX
AC ADD70021;
XX
XX 29-JAN-2004 (first entry)
XX
DE Bombesin/GRP-derived peptide #8.
XX
XX gastrointestinal disorder; diabetes; malignant proliferation;
XX benign proliferation; bombesin; gastrin-releasing peptide; GRP;
XX growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
XX small cell lung carcinoma; motility disorder;
XX exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
XX paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX Modified-site 1 /note= "Pyro-Glu"
XX
XX Misc-difference 6 /note= "D-form residue"
XX
XX Modified-site 8..9 /note= "Non-peptide bond (psi [CH2NH])"
XX
XX Modified-site 9 /note= "Amidated"
XX
XX US2003050436-A1.
XX
XX 13-MAR-2003.
XX
XX 23-OCT-2001; 2001US-00004530.
XX
XX 24-SEP-1987; 87US-00100571.
XX
XX 25-MAR-1988; 88US-00173311.
PR

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PR 08-JUN-1988; 88US-00204171.
PR 16-JUN-1988; 88US-00207759.
PR 23-SEP-1988; 88US-00248771.
PR 14-OCT-1988; 88US-00257998.
PR 09-DEC-1988; 88US-00282328.
PR 02-MAR-1989; 89US-00317941.
PR 07-JUL-1989; 89US-00376555.
PR 21-AUG-1989; 89US-00397169.
PR 30-MAR-1990; 90US-00502438.
PR 18-OCT-1991; 91US-00779039.
PR 10-NOV-1994; 94US-00337127.
PR 02-MAR-1999; 99US-00260846.
XX
XX (BIOM-) BIOMEASURE INC.
XX
XX COY DH, Moreau J, Kim SH;
XX WPI; 2003-810756/76.
XX
XX New therapeutic peptide used for treating e.g. gastrointestinal
XX disorders, atherosclerosis, cancer, diabetes related retinopathy and
XX diabetes.
XX
XX Disclosure; Page 12; 23pp; English.
XX
XX
XX The invention relates to a new therapeutic peptide comprises 7-10 amino
XX acid residues. The peptide is an analogue of naturally occurring peptides
XX terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
XX gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
XX growth hormone releasing factor (GRF), litorin and neuromedin C) of
XX formula detailed in the specification. The peptides are used for treating
XX cancer e.g. small cell lung carcinoma, motility disorders of the
XX gastrointestinal tract and symptomatic relief and/or treatment of
XX exocrine pancreatic carcinoma and for restoration of appetite in cachexia
XX patients, as autocrine or paracrine mitotic agent, and for treating
XX benign and malignant proliferation of tissue, gastrointestinal disorders,
XX atherosclerosis and diabetes and diabetic retinopathy. The present
XX sequence is a peptide of the invention.
XX
XX Sequence 9 AA;
XX
Query Match 100.0%; Score 25; DB 7; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 XXXXVXHL 8
   |:::|
Db 1 EQWAVGHL 8

RESULT 141
ADD70029
ID ADD70029 standard; peptide; 9 AA.
XX
AC ADD70029;
XX
XX 29-JAN-2004 (first entry)
XX
DE Bombesin/GRP-derived peptide #16.
XX
XX gastrointestinal disorder; diabetes; malignant proliferation;
XX benign proliferation; bombesin; gastrin-releasing peptide; GRP;
XX growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
XX small cell lung carcinoma; motility disorder;
XX exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
XX paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX Modified-site 1 /note= "D-form Naphthylalanine"
XX
XX Modified-site 8..9
FT

```

FT	Modified-site	/note= "Non-peptide bond (pep [CH2NH])"
FT		9
FT		/note= "Amidated"
XX		
XX	US2003050436-A1.	
XX		
XX	13-MAR-2003.	
XX		
XX	23-OCT-2001; 2001US-00004530.	
XX		
XX	24-SEP-1987; 87US-00100571.	
XX	25-MAR-1988; 88US-00173311.	
XX	08-JUN-1988; 88US-00204171.	
XX	16-JUN-1988; 88US-00207759.	
XX	23-SEP-1988; 88US-00248771.	
XX	14-OCT-1988; 88US-00257998.	
XX	09-DEC-1988; 88US-00282328.	
XX	02-MAR-1989; 89US-00317941.	
XX	07-JUL-1989; 89US-00376555.	
XX	21-AUG-1989; 89US-00397169.	
XX	30-MAR-1990; 90US-00502438.	
XX	18-OCT-1991; 91US-00779039.	
XX	10-NOV-1994; 94US-00337127.	
XX	02-MAR-1999; 99US-00260846.	
XX		
XX	(BIOM-) BIOMEASURE INC.	
XX		
XX	Coy DH, Moreau J, Kim SH;	
XX		
XX	WPI; 2003-810756/76.	
XX		
PT	New therapeutic peptide used for treating e.g. gastrointestinal	
PT	disorders, atherosclerosis, cancer, diabetes related retinopathy and	
PT	diabetes.	
XX		
XX		
PS	Disclosure; Page 12; 23pp; English.	
XX		
CC	The invention relates to a new therapeutic peptide comprises 7-10 amino	
CC	acid residues. The peptide is an analogue of naturally occurring peptides	
CC	terminating at the carboxy-terminus with a Met residue (e.g. bombesin,	
CC	gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),	
CC	growth hormone releasing factor (GRF), litorin and neuromedin C) of	
CC	formula detailed in the specification. The peptides are used for treating	
CC	cancer e.g. small cell lung carcinoma, motility disorders of the	
CC	gastrointestinal tract and symptomatic relief and/or treatment of	
CC	exocrine pancreatic carcinoma and for restoration of appetite in cachexia	
CC	patients, as anocrine or paracrine mitotic agent, and for treating	
CC	benign and malignant proliferation of tissue, gastrointestinal disorders,	
CC	atherosclerosis and diabetes and diabetic retinopathy. The present	
CC	sequence is a peptide of the invention.	
XX		
XX		
SO	Sequence 9 AA:	
	Query Match	100.0%; Score 25; DB 7; Length 9;
	Best Local Similarity	62.5%; Pred. No. 1.4e+06;
	Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;	
OY	1 XQXXVXHL 8	
	::	
DB	1 XQNAVGH 8	
	RESULT 142	
	AA96113	
XX	AA96113 standard; protein; 10 AA.	
XX		
XX	AA96113;	
XX	25-MAR-2003 (revised)	
XX	22-DEC-1990 (first entry)	
XX		
XX	Sequence of new neuromedin C deriv.	
XX		

KW	Bombesin antagonist; malignant disease; therapy; gastric acid secretion.
XX	Synthetic.
FX	Location/Qualifiers
FH	Key
FT	Misc-difference 1 /label= OTHER
FT	/note= "benzylloxycarbonyl-Arg"
FT	Misc-difference 3 /label= OTHER
FT	/note= "Lys(Benzylloxycarbonyl)"
FT	Misc-difference 4 /label= OTHER
FT	/note= "D-Gln"
FT	Misc-difference 8 /label= OTHER
FT	/note= "D-Ala"
FT	Misc-difference 10 /label= OTHER
FT	/note= "Leu-One"
PN	EPJ5367-A.
PD	10-MAY-1989.
PP	27-OCT-1988; 88EP-00310094.
PR	02-NOV-1987; 87GB-00025598.
PR	15-FEB-1988; 88GB-00003478.
PR	06-JUN-1988; 88GB-00013355.
PA	(ICIL) IMPERIAL CHEM IND PLC.
PI	Camble R, Cotton R, Dutta AS, Hayward CF;
DR	WPI; 1989-139341/19.
XX	New Neuromedin C polypeptide derivs. - are potent bombesin antagonists
PT	used for treating malignant disease and conditions associated with
PT	gastrin or gastric acid secretion.
XX	Disclosure; Page 929; 49pp; English.
PS	It is a potent bombesin antagonist. It may be used for the treatment of
CC	e.g. malignant disease, conditions associated with the over-prodn. of
CC	bombesin and conditions associated with failure of normal physiological
CC	control of the regulation of gastric acid secretion. (Updated on 25-MAR-
CC	2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA field.)
XX	Sequence 10 AA;
SQ	
Query Match	100.0%; Score 25; DB 1; Length 10;
Best Local Similarity	50.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;	
Oy	1 QXXXVXHL 8 ::: ::
Db	3 KQMAVAHL 10
RESULT 143	
ID AAR04533	AAR04533 standard; protein; 10 AA.
XX AAR04533;	
AC	
DT 25-MAR-2003	(revised)
DT 24-SEP-1990	(first entry)
XX Non-cyclic analogue of amphibian bombesin and mammalian GRP.	
XX Mammalian gastrin releasing peptide; amphibian bombesin; cancer;	
KW therapeutic peptides;	

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XX OS Synthetic.
XX FH Key
XX FT Modified-site
XX FT Modified-site
XX FT Modified-site
XX PN WO9003980-A.
XX PD 19-APR-1990.
XX PF 14-OCT-1988; 88US-00257998.
XX PR 14-OCT-1988; 88US-00257998.
XX PR 09-DEC-1988; 88US-00282328.
XX PR 02-MAR-1989; 89US-00317941.
XX PR 07-JUL-1989; 89US-00376555.
XX PR 21-AUG-1989; 89US-00397169.
XX PA (TTLA ) TULANE EDUCATIONAL FUND.
XX PA (BIOM-) BIOMEASURE INC.
XX PI Coy DH, Moreau JP, Taylor JE, Kim SH;
XX DR WPI; 1990-147822/19.
XX PT New non-cyclic analogues of mammalian gastrin-releasing peptide - and
XX PT amphibian bombesin, used for cancer treatment, e.g. small cell lung
XX PT carcinoma, atherosclerosis and gastrointestinal disorders.
XX PS Claim 31; Page 61; 68pp; English.
XX CC C-terminal = NH2. The peptide has an active site and a binding site for
XX CC binding to a target cell receptor, and has one of the following
XX CC modifications: (a) a deletion of a residue within the active site and a
XX CC modification of a residue outside of the active site; and (b) a
XX CC replacement of 1 or 2 residues within the active site with a synthetic
XX CC amino acid. On binding to its receptor, the analogue acts as a
XX CC competitive inhibitor of the naturally occurring peptide but due to the
XX CC modifications, fails to exhibit the normal in vivo biological activity.
XX CC The peptides are useful for the treatment of benign or malignant
XX CC proliferation of tissues, eg cancers of the gastrointestinal tract,
XX CC pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
XX CC treatment of atherosclerosis; and disorders of the gastrointestinal
XX CC tissues. This peptide is a claimed example of a highly genetic formula.
XX CC See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
XX CC (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
XX CC correct PI field.)
XX SQ Sequence 10 AA;
XX
XX Query Match 100.0%; Score 25; DB 2; Length 10;
XX Best Local Similarity 50.0%; Pred. No. 1.4e+02;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 XQXXVXHL 8
XX :|::|::|
XX Db 2 PQMAVGH 9
XX
XX RESULT 144
XX AAW50618
XX ID AAW50618 standard; peptide; 10 AA.
XX AC AAW50618;
XX XX
XX DT 27-AUG-2003 (revised)
XX DT 14-SEP-1998 (first entry)
XX XX
XX DE Bombesin (laet 10 amino acids) .

```

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XX KW Cancer; gastrin releasing peptide; neuromedin B; neuromedin C; bombesin;
XX KM litorin; peptide analogue; colon; prostate; breast cancer.
XX OS Amphibia.
XX PN US5736517-A.
XX PD 07-APR-1998.
XX PF 08-JUN-1993; 93US-00073771.
XX PR 15-SEP-1989; 89US-00408125.
XX PR 21-NOV-1989; 89US-00440039.
XX PR 09-MAY-1990; 90US-00520225.
XX PA (BIOM-) BIOMEASURE INC.
XX PI Bogden AE, Moreau J;
XX DR WPI; 1998-239254/21.
XX PT Treatment of cancer in mammals, particularly of the colon, prostate or
XX PT breast - comprises the administration of a cell inhibiting peptide.
XX PS Disclosure; Fig 9; 24pp; English.
XX CC The invention relates to a method of treating cancer which involves
XX CC administering a cancer cell inhibiting amount of an analogue of a
XX CC naturally occurring biologically active peptide or a fragment thereof,
XX CC the peptide being one of mammalian gastrin releasing peptide, neuromedin
XX CC B, neuromedin C, amphibian bombesin or litorin. The peptides are useful
XX CC in the treatment of mammalian, especially human cancers, particularly
XX CC colon, prostate, lung, breast and pancreatic cancer. The analogues can
XX CC also be used to treat non-malignant proliferative diseases in humans. The
XX CC present sequence represents the laet 10 amino acids of amphibian
XX CC bombesin. (Updated on 27-AUG-2003 to correct OS field.)
XX SQ Sequence 10 AA;
XX
XX Query Match 100.0%; Score 25; DB 2; Length 10;
XX Best Local Similarity 50.0%; Pred. No. 1.4e+02;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 XQXXVXHL 8
XX :|::|::|
XX Db 2 PQMAVGH 9
XX
XX RESULT 145
XX AAB96029
XX ID AAB96029 standard; peptide; 10 AA.
XX AC AAB96029;
XX XX
XX DT 25-JUN-2001 (first entry)
XX DT HPV 18 E7 A2 MHC-binding epitope SEQ ID 145.
XX DE
XX XX Epitope; tumour antigen; antiviral; immunostimulatory; cervical cancer;
XX KW human papillomavirus-associated disease; condyloma; cervical dysplasia;
XX KW cervical dysplasia; major histocompatibility complex; MHC I.
XX OS Human papillomavirus.
XX PN WO200119408-A1.
XX PD 22-MAR-2001.
XX PF 18-SEP-2000; 2000WO-US025559.
XX PR 16-SEP-1999; 99US-00398534.
XX PR 16-SEP-1999; 99US-0154665P.

```

PR 09-DEC-1999; 99US-00458173.
 PR 09-DEC-1999; 99US-0169846P.
 XX
 PA (ZYCO-) ZYCO INC.
 XX
 PI Hedley ML, Urban RC, Chicz RM;
 XX WPI, 2001-26596/27.
 DR
 XX Novel nucleic acids encoding polypeptide polypeptides containing multiple
 PT epitopes from one or more proteins, useful for treating tumors and as
 PT vaccines against pathogenic agents.
 XX
 PS Disclosure; Page 23; 64pp; English.
 XX
 CC This invention relates to polynucleotides encoding a hybrid polypeptide
 CC comprising a signal sequence and three segments that are either
 CC contiguous or separated by a spacer amino acid or spacer peptide. The
 CC invention specifically details polynucleotides encoding a polypeptide
 CC peptide where the peptide segments are tumor antigens or a naturally
 CC occurring protein of a pathogenic agent. The polypeptide peptides exhibit
 CC antiviral and immunostimulatory activity. The polynucleotide and
 CC polypeptide peptides are useful for eliciting an immune response in a
 CC mammal. The polynucleotide and protein are useful as vaccines for
 CC treating tumors and pathogenic infections. The polynucleotide is also
 CC useful for preventing or treating human papillomavirus (HPV)-associated
 CC diseases, particularly exophytic condyloma, flat condyloma, cervical HPV
 CC cancer, respiratory papilloma, conjunctival papilloma, genital-tract HPV
 CC infection, cervical dysplasia, high grade squamous intraepithelial
 CC lesions, and anal HPV infection. The polynucleotide and polypeptide are
 CC useful for generating or enhancing prophylactic or therapeutic immune
 CC response against pathogens, tumors or autoimmune diseases in a
 CC population of individuals having diverse MHC allotypes, as positive
 CC controls in T cell stimulation assays in vitro, and as tools to
 CC understand processing of epitopes within cells. Peptides AAB95894 -
 CC AAB96037 and AAB96044 - AAB96048 represent major histocompatibility
 CC complex I (MHC I) associated tumor and pathogen antigens. The peptides
 CC can be used as part of the polypeptide proteins of the invention. Also
 CC included are examples of the polypeptide proteins represented by AAB96050
 CC - AAB96053, and localization signal peptides AAB96038 - AAB96043 and
 CC AAB96049 which can be used in the construction of the polypeptide
 CC peptides
 CC
 XX
 SQ Sequence 10 AA;
 Query Match 100.0%; Score 25; DB 4; Length 10;
 Best Local Similarity 50.0%; Pred. No. 1.4e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QXXXVXHL 8
 Db 3 LQDIVLHL 10
 RESULT 146
 AAB06675
 ID ABB06675 standard; peptide: 10 AA.
 XX
 AC ABB06675;
 XX
 DT 10-JUN-2002 (first entry)
 XX
 XX Amphibian bombesin peptide SEQ ID NO:14.
 XX
 KW Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; licoen;
 KW growth hormone releasing factor; cytostatic; antidiabetic; antihypertensive;
 KW gastroenteric; antidiabetic; ophthalmological; atherosclerosis;
 KW autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
 KW malignant proliferation; benign proliferation; pancreatic secretion;
 KW motility; amylase secretion suppression; appetite; muscular dystrophy;
 KW diabetes.
 XX
 OS Amphibia.

XX
 PN US6307017-B1.
 XX
 PD 23-OCT-2001.
 XX
 XX 02-MAR-1999; 99US-00260846.
 PF
 XX
 XX 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 XX
 PA (BIOM-) BIOMEDURE INC.
 PA (TULA) TULANE EDUCATIONAL FUND.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX WPI, 2002-162970/21.
 DR
 XX
 PT New antagonistic analogs of licoen and similar peptides, are useful for
 PT treating malignant or benign proliferation or gastrointestinal disorders.
 XX
 PS Disclosure; Fig 2; 29pp; English.
 XX
 CC The present invention describes therapeutic peptides (A) or their salts
 CC of 7-10 amino acids (aa) that are analogues of the natural peptides,
 CC having C-terminal Met, licoen or the 10 aa C-terminal region of either
 CC mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
 CC cytostatic, antihypertensive, gastrointestinal, antidiabetic and
 CC ophthalmological activities and can be used as natural peptide
 CC antagonists. The peptide pyroglu-Gln-Trp-Ala-Val-Gly-His-Leu-serine-NH2
 CC has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
 CC cells of 150 nM and IC50 for inhibition of bombesin-stimulated
 CC incorporation of tritiated thymidine into small cell lung cancer cells
 CC (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
 CC substance related to (A) acts as autocrine or paracrine mitotic factor;
 CC e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
 CC or disorders of gastric or pancreatic secretion or motility, e.g. to
 CC suppress secretion of amylase and to control appetite (particularly
 CC restoration of appetite in patients with cachexia). Antagonists of GRP
 CC also suppresses the release of growth hormone so can be used to slow down
 CC progression of muscular dystrophy and to treat diabetes (or associated
 CC retinopathy). The present sequence represents a peptide which is used in
 CC the exemplification of the present invention
 CC
 XX
 SQ Sequence 10 AA;
 Query Match 100.0%; Score 25; DB 5; Length 10;
 Best Local Similarity 50.0%; Pred. No. 1.4e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QXXXVXHL 8
 Db 2 NQMAVGH 9
 RESULT 147
 ADD70036
 ID ADD70036 standard; peptide: 10 AA.
 XX
 AC ADD70036;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 XX

DE Therapeutic peptide Bombesin, C-terminus.
 XX
 XX gastrointestinal disorder; diabetes; malignant proliferation;
 KM benign proliferation; bombesin; gastrin-releasing peptide; GRP;
 KM growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
 KM small cell lung carcinoma; motility disorder;
 KM exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
 KM paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
 XX
 OS Synthetic.
 XX
 XX US2003050436-A1.
 PN
 XX
 PD 13-MAR-2003.
 XX
 PF 23-OCT-2001; 2001US-00004530.
 XX
 XX 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00248771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 PR 02-MAR-1999; 99US-00260846.
 XX
 XX (BIOM-) BIOMEASURE INC.
 XX
 PI Coy DH, Moreau J, Kim SH;
 XX
 DR WPI; 2003-810756/76.
 XX
 PT New therapeutic peptide used for treating e.g. gastrointestinal
 PT disorder, atherosclerosis, cancer, diabetes related retinopathy and
 PT diabetes.
 XX
 XX
 PS Disclosure; Fig 2; 23pp; English.
 XX
 XX The invention relates to a new therapeutic peptide comprises 7-10 amino
 CC acid residues. The peptide is an analogue of naturally occurring peptides
 CC terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
 CC gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP),
 CC growth hormone releasing factor (GRF), litorin and neuromedin C) of
 CC formula detailed in the specification. The peptides are used for treating
 CC cancer e.g. small cell lung carcinoma, motility disorders of the
 CC gastrointestinal tract and symptomatic relief and/or treatment of the
 CC exocrine pancreatic carcinoma and for restoration of appetite in cachexia
 CC patients, as autocrine or paracrine mitotic agent, and for treating
 CC benign and malignant proliferation of tissue, gastrointestinal disorders,
 CC atherosclerosis and diabetes and diabetic retinopathy. The present
 CC sequence is one of the naturally occurring peptides upon which the
 CC peptides of the invention are based.
 XX
 XX Sequence 10 AA;
 SQ
 Query Match 100.0%; Score 25; DB 7; Length 10;
 Best Local Similarity 50.0%; Pred. No. 1.4e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XXXXXVXHL 8
 :|::|:
 Db 2 NQMAVGH 9
 RESULT 148
 AAY82106
 ID AAY82106 standard; peptide; 11 AA.

XX
 AC AAY82106;
 XX
 DT 02-JUN-2000 (first entry)
 XX
 DE Bombesin homologue peptide #1.
 XX
 XX Bombesin; technetium-99m label; radioimaging; radiodiagnostic;
 KM mercaptoacetyltriglycine; MAG3; radiolabelling; nuclear medicine;
 KM peptide synthesis.
 XX
 XX
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT Mlec-difference 4 /note= "D-form residue"
 FT Modified-site 11 /note= "amidated"
 FT
 FT
 PN CA2225326-A1.
 XX
 PD 19-JUN-1999.
 XX
 PF 19-DEC-1997; 97CA-02225326.
 XX
 PR 19-DEC-1997; 97CA-02225326.
 XX
 PR 19-DEC-1997; 97CA-02225326.
 XX
 PA (OKAR/) OKARI S M.
 PA (WISH/) WISHART D.
 PA (VDOM/) VAN DOMESLAAR G.
 PA (SURE/) SURESH M R.
 XX
 PI Okarvi SM, Wishart D, Van Domeselaar G, Suresh MR;
 XX
 XX
 DR WPI; 2000-238088/21.
 XX
 PT Preparation of 99mTc-labelled peptides, used in radioimaging, comprises
 PT allowing a mercaptoacetyltriglycine technetium chelate to be attached
 PT directly onto a growing peptide chain.
 XX
 XX
 PS Disclosure; Page 5; 27pp; English.
 XX
 XX The present invention describes the preparation of 99mTc-labelled
 CC peptides comprising a simple solid phase synthetic approach which allows
 CC a mercaptoacetyltriglycine (MAG3) technetium chelate to be attached
 CC directly onto a growing peptide chain using conventional solid phase
 CC peptide chemistry. The method is used for preparing 99mTc-labelled
 CC peptides for use in radioimaging and radiodiagnosis. The process
 CC requires less purification steps than prior art, eliminates the need for
 CC solution-phase conjugation and avoids problems associated with non-
 CC specifically labeled with 99mTc (92%), are highly resistant to cysteine
 CC challenge, are very stable to plasma and can bind with desired cellular
 CC targets. The present sequence represents a bombesin homologue peptide
 CC used in the exemplification of the present invention
 XX
 XX Sequence 11 AA;
 SQ
 Query Match 100.0%; Score 25; DB 3; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XXXXXVXHL 8
 :|::|:
 Db 4 FQMAVGH 11
 RESULT 149
 AAB19953
 ID AAB19953 standard; peptide; 11 AA.
 XX
 AC AAB19953;
 XX

DT 19-MAR-2001 (first entry)
 XX Bombesin analogue, used in peptide-dye conjugate.
 DB Bombesin analogue; dye-peptide conjugate; diagnosis; imaging; therapy;
 XX Bombesin analogue; dye-peptide conjugate; diagnosis; imaging; therapy;
 KW tumour; atherosclerosis.
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH Modified-site 11 /note= "C-terminal amide"
 FT
 XX WO200071162-A2.
 XX
 XX 30-NOV-2000.
 XX
 XX 26-APR-2000; 2000WO-US011060.
 XX
 XX 20-MAY-1999; 99US-0135060P.
 PR 04-JUN-1999; 99US-00325769.
 XX
 XX (MLCW) MALLINCKRODT INC.
 PA
 PI Achillefu S, Dorshow RB, Bugaj JE, Rajagopalan R;
 XX WPI; 2001-061299/07.
 DR
 XX
 XX Compositions used in diagnosis and therapy of e.g. tumors or
 PT atherosclerosis, comprise cyanine dye bioconjugates.
 PS
 XX Example 6; Page 11; 38pp; English.
 CC The present sequence is that of a bombesin analogue obtained by chemical
 CC synthesis. The peptide is used as a tumour-specific moiety in novel dye-
 CC peptide conjugates useful in diagnosis and therapy. Such conjugates
 CC include several cyanine dyes with a variety of bis- and tetrakis
 CC (carboxylic acid) homologues. Their small size allows more favorable
 CC delivery to tumour cells. The dye-peptide conjugates are useful for:
 CC localized therapy; optical tomographic, endoscopic, photoacoustic and
 CC sonofluorescent applications for the detection and treatment of tumours
 CC and other abnormalities; detection of the presence of tumours and other
 CC abnormalities by monitoring the blood clearance profile of the conjugates
 CC ; laser assisted guided surgery for the detection of small
 CC micrometastases; and for diagnosis of atherosclerotic plaques and blood
 CC clots (all claimed). Fluorescence quenching is prevented by the use of
 CC biocompatible organic solvents
 CC
 XX Sequence 11 AA;
 SQ
 QY Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 DB 1 XQXXVXHL 8
 3 GQWAVGHL 10
 RESULT 150
 AAB19954
 ID AAB19954 standard; peptide; 11 AA.
 XX
 XX AAB19954;
 AC
 XX
 XX 19-MAR-2001 (first entry)
 DT
 XX Bombesin analogue, used in peptide-dye conjugate.
 DB Bombesin analogue; dye-peptide conjugate; diagnosis; imaging; therapy;
 KW tumour; atherosclerosis.
 XX Synthetic.

XX Key Location/Qualifiers
 FH Modified-site 11 /note= "C-terminal amide"
 FT
 XX WO200071162-A2.
 XX
 XX 30-NOV-2000.
 XX
 XX 26-APR-2000; 2000WO-US011060.
 XX
 XX 20-MAY-1999; 99US-0135060P.
 PR 04-JUN-1999; 99US-00325769.
 XX
 XX (MLCW) MALLINCKRODT INC.
 PA
 PI Achillefu S, Dorshow RB, Bugaj JE, Rajagopalan R;
 XX WPI; 2001-061299/07.
 DR
 XX
 XX Compositions used in diagnosis and therapy of e.g. tumors or
 PT atherosclerosis, comprise cyanine dye bioconjugates.
 PS
 XX Example 6; Page 11; 38pp; English.
 CC The present sequence is that of a bombesin analogue obtained by chemical
 CC synthesis. The peptide is used as a tumour-specific moiety in novel dye-
 CC peptide conjugates useful in diagnosis and therapy. Such conjugates
 CC include several cyanine dyes with a variety of bis- and tetrakis
 CC (carboxylic acid) homologues. Their small size allows more favorable
 CC delivery to tumour cells. The dye-peptide conjugates are useful for:
 CC localized therapy; optical tomographic, endoscopic, photoacoustic and
 CC sonofluorescent applications for the detection and treatment of tumours
 CC and other abnormalities; detection of the presence of tumours and other
 CC abnormalities by monitoring the blood clearance profile of the conjugates
 CC ; laser assisted guided surgery for the detection of small
 CC micrometastases; and for diagnosis of atherosclerotic plaques and blood
 CC clots (all claimed). Fluorescence quenching is prevented by the use of
 CC biocompatible organic solvents
 CC
 XX Sequence 11 AA;
 SQ
 QY Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 DB 1 XQXXVXHL 8
 3 GQWAVGHL 10
 RESULT 151
 AAB69152
 ID AAB69152 standard; peptide; 11 AA.
 XX
 XX AAB69152;
 AC
 XX
 XX 25-APR-2001 (first entry)
 DT
 XX Bombesin analogue peptide SEQ ID NO:2.
 DB
 XX Optical modality; cyanine dye; imaging; diagnosis; detection; tumour;
 KW optical diagnostic imaging; therapy; cytosstatic; blood clot;
 KW atherosclerotic plaque; photodynamic therapy; LAGS; micrometastasis;
 KW laser assisted guided surgery.
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH Modified-site 11 /note= "amidated"
 FT
 XX US6180085-B1.
 PN

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XX 30-JAN-2001.
XX
XX 18-JAN-2000; 2000US-00484318.
XX
XX 18-JAN-2000; 2000US-00484318.
XX
XX (MLCW ) MALLINCKRODT INC.
XX
XX Achilefu S, Rajagopalan R, Dorshow RB, Bugaj JE;
XX WPI; 2001-201896/20.
XX
XX Composition useful for imaging, diagnosis and therapy of various diseased
XX PT states comprises cyanine dyes that absorb and emit light in near infrared
XX PT region of electromagnetic spectrum.
XX
XX Example 9; Col 14; 12pp; English.
XX
XX The present invention describes a composition which comprises cyanine
XX CC dyes (I). (I) has cytostatic activity. (I) is useful for performing a
XX CC diagnostic or therapeutic procedure, e.g. for diagnosing atherosclerotic
XX CC plaques and blood clots, and for localised therapy, photodynamic therapy
XX CC and laser assisted guided surgery (LAGS) for the detection of
XX CC micrometastases. (I) are also useful for imaging, diagnosis and therapy,
XX CC of various diseased states, for optical diagnostic imaging and therapy,
XX CC in endoscopic applications for the detection of tumours and other
XX CC abnormalities, for photoacoustic tumour imaging, detection and therapy
XX CC and for sonofluorescence tumour imaging, detection and therapy. (I)
XX CC prevent dye aggregation in solution predisposed to form dendrimers,
XX CC capable of absorbing or emitting beyond 800 nm, have good photophysical
XX CC properties, and have tissue-specific targeting capability. The present
XX CC sequence represents a peptide which is used in an example from the
XX CC present invention
XX
XX Sequence 11 AA;
XX
XX Query Match 100.0%; Score 25; DB 4; Length 11;
XX Best Local Similarity 50.0%; Pred. No. 1.6e+02;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 XQXXVXHL 8
Db ::::|
3 GQMAVGHL 10

```

```

PR 18-JAN-2000; 2000US-00484318.
XX
XX (MLCW ) MALLINCKRODT INC.
XX
XX Achilefu S, Rajagopalan R, Dorshow RB, Bugaj JE;
XX WPI; 2001-201896/20.
XX
XX Composition useful for imaging, diagnosis and therapy of various diseased
XX PT states comprises cyanine dyes that absorb and emit light in near infrared
XX PT region of electromagnetic spectrum.
XX
XX Example 9; Col 14; 12pp; English.
XX
XX The present invention describes a composition which comprises cyanine
XX CC dyes (I). (I) has cytostatic activity. (I) is useful for performing a
XX CC diagnostic or therapeutic procedure, e.g. for diagnosing atherosclerotic
XX CC plaques and blood clots, and for localised therapy, photodynamic therapy
XX CC and laser assisted guided surgery (LAGS) for the detection of
XX CC micrometastases. (I) are also useful for imaging, diagnosis and therapy,
XX CC of various diseased states, for optical diagnostic imaging and therapy,
XX CC in endoscopic applications for the detection of tumours and other
XX CC abnormalities, for photoacoustic tumour imaging, detection and therapy
XX CC and for sonofluorescence tumour imaging, detection and therapy. (I)
XX CC prevent dye aggregation in solution predisposed to form dendrimers,
XX CC capable of absorbing or emitting beyond 800 nm, have good photophysical
XX CC properties, and have tissue-specific targeting capability. The present
XX CC sequence represents a peptide which is used in an example from the
XX CC present invention
XX
XX Sequence 11 AA;
XX
XX Query Match 100.0%; Score 25; DB 4; Length 11;
XX Best Local Similarity 50.0%; Pred. No. 1.6e+02;
XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 XQXXVXHL 8
Db ::::|
3 GQMAVGHL 10

```


PS Example 9; Col 14; 16pp; English.

CC The present invention relates to a composition with indocyanine dyes. The
CC invention is useful for performing a diagnostic or therapeutic procedure,
CC e.g. for diagnosing atherosclerotic plaques and blood clots, and for
CC localized therapy photodynamic therapy and laser assisted guided surgery
CC (LAGS) for the detection of micrometastases

XX Sequence 11 AA;

Query Match 100.0%; Score 25; DB 4; Length 11;

Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
: : : : :
Db 3 GQMAVGHL 10

RESULT 154

AAB71698
ID AAB71698 standard; peptide; 11 AA.

XX AAB71698;

DT 14-MAY-2001 (first entry)

DE Bombesin analog.

KW Indocyanine dye; diagnosis; atherosclerosis; cancer; micrometastases.

OS Synthetic.

XX US6180087-B1.

PN 30-JAN-2001.

PF 18-JAN-2000; 2000US-00484320.

XX 18-JAN-2000; 2000US-00484320.

PA (MLCW) MALLINCKRODT INC.

PI Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JE;

XX WPI; 2001-225779/23.

DT Novel indocyanine dyes that absorb and emit light in the near infrared
PT region of electromagnetic spectrum, useful for imaging, diagnosis and
PT therapy of various diseased states.

XX Example 9; Col 14; 16pp; English.

PS The present invention relates to a composition with indocyanine dyes. The

CC invention is useful for performing a diagnostic or therapeutic procedure,
CC e.g. for diagnosing atherosclerotic plaques and blood clots, and for
CC localized therapy photodynamic therapy and laser assisted guided surgery
CC (LAGS) for the detection of micrometastases

XX Sequence 11 AA;

Query Match 100.0%; Score 25; DB 4; Length 11;

Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
: : : : :
Db 3 GQMAVGHL 10

RESULT 155
AAB70512
ID AAB70512 standard; peptide; 11 AA.

XX AAB70512;

AC 08-MAY-2001 (first entry)

DT Bombesin analogue sequence SEQ ID NO:3.

DE Octreotide; octreotate; bombesin; cholecystokinin; neurotensin;

KW optical modality; cyanine dye; imaging; diagnosis; therapy; tumour;

KW endoscopic application; detection; atherosclerotic plaque; blood clot;

XX laser assisted guided surgery; LAGS; micrometastasis.

OS Synthetic.

XX US6180086-B1.

PN 30-JAN-2001.

PF 18-JAN-2000; 2000US-00484319.

XX 18-JAN-2000; 2000US-00484319.

PA (MLCW) MALLINCKRODT INC.

PI Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JE;

XX WPI; 2001-234224/24.

DT Novel hydrophilic cyanine dyes absorb and emit light in the near infrared
PT region of electromagnetic spectrum, useful for imaging, diagnosis and
PT therapy of various diseased states.

XX Example 9; Col 13; 15pp; English.

PS The present invention describes a composition comprising hydrophilic

CC cyanine dyes (I). Also described is a method for the preparation of (I).

CC (I) is useful for performing a diagnostic or therapeutic procedure, e.g.

CC for diagnosing atherosclerotic plaques and blood clots, and for localised

CC therapy, photodynamic therapy and laser assisted guided surgery (LAGS)

CC for the detection of micrometastases. The dyes are also useful for

CC imaging, diagnosis and therapy of various diseased states, for optical

CC diagnostic imaging and therapy, in endoscopic applications for the

CC detection of tumours and other abnormalities, for photoacoustic tumour

CC imaging, detection and therapy, and for sonofluorescence tumour imaging,

CC detection and therapy; The dyes prevent dye aggregation in solution

CC predisposed to form dendrimers, capable of absorbing or emitting beyond

CC 800 nm, possess desirable photophysical properties, and endowed with

CC tissue-specific targeting capability. The present sequence represents a

CC bombesin analogue which is used in an example from the present invention

XX for the synthesis of octreotate

XX Sequence 11 AA;

Query Match 100.0%; Score 25; DB 4; Length 11;

Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHL 8
: : : : :
Db 3 GQMAVGHL 10

RESULT 156

AAB70511
ID AAB70511 standard; peptide; 11 AA.

XX AAB70511;

AC 08-MAY-2001 (first entry)

XX Bombesin analogue sequence SEQ ID NO:2.
 DE
 XX
 XX Octreotide; octreotate; bombesin; cholecystokinin; neurotensin;
 KM optical modality; cyanine dye; imagine; diagnosis; therapy; tumour;
 KM endoscopic application; detection; atherosclerotic plaque; blood clot;
 KM laser assisted guided surgery; LAGS; micrometastasis.
 XX
 XX Synthetic.
 OS
 FH Key Location/Qualifiers
 FT Modified-site 11
 FT /note= "amidated"
 XX
 XX US6180086-B1.
 PN
 XX 30-JAN-2001.
 PD
 XX 18-JAN-2000; 2000US-00484319.
 PF
 XX 18-JAN-2000; 2000US-00484319.
 PR
 XX 18-JAN-2000; 2000US-00484319.
 XX
 PA (MLCW) MALLINCKRODT INC.
 XX
 XX Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JB;
 PI WPI; 2001-234224/24.
 DR
 XX
 XX Novel hydrophilic cyanine dyes absorb and emit light in the near infrared
 PT region of electromagnetic spectrum, useful for imaging, diagnosis and
 PT therapy of various diseased states.
 XX
 XX Example 9; Col 13; 15pp; English.
 PS
 XX The present invention describes a composition comprising hydrophilic
 CC cyanine dyes (I). Also described is a method for the preparation of (I).
 CC (1) is useful for performing a diagnostic or therapeutic procedure, e.g.
 CC for diagnosing atherosclerotic plaques and blood clots, and for localised
 CC therapy, photodynamic therapy and laser assisted guided surgery (LAGS)
 CC for the detection of micrometastases. The dyes are also useful for
 CC imaging, diagnosis and therapy of various diseased states, for optical
 CC diagnostic imaging and therapy, in endoscopic applications for the
 CC detection of tumours and other abnormalities, for photoacoustic tumour
 CC imaging, detection and therapy, and for somofluorescence tumour imaging,
 CC detection and therapy. The dyes prevent dye aggregation in solution
 CC predisposed to form dendrimers, capable of absorbing or emitting beyond
 CC 800 nm, possess desirable photophysical properties, and endowed with a
 CC tissue-specific targeting capability. The present sequence represents a
 CC bombesin analogue which is used in an example from the present invention
 CC for the synthesis of octreotate
 XX
 SQ Sequence 11 AA;
 Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XXXXXVXHL 8
 Db 3 GQMAVGH 10
 RESULT 157
 AAB73422
 ID AAB73422 standard; peptide; 11 AA.
 AC AAB73422;
 XX
 XX 25-JUN-2001 (first entry)
 DT
 XX Bombesin analogue peptide, SEQ ID NO:2.
 DE Bombesin analogue; bioconjugate; bis-indocyanine dye; hydrophilic;
 KM

KM optical diagnostic imaging; tumour detection; cancer; endoscopy;
 KM coronary angiography; atherosclerotic plaque; blood clot.
 XX
 XX Synthetic.
 OS
 FH Key Location/Qualifiers
 FT Modified-site 11
 FT /note= "C-terminal amide"
 XX
 XX US6183726-B1.
 PN
 XX 06-FEB-2001.
 PD
 XX 18-JAN-2000; 2000US-00484321.
 PF
 XX 18-JAN-2000; 2000US-00484321.
 PR
 XX 18-JAN-2000; 2000US-00484321.
 XX
 PA (MLCW) MALLINCKRODT INC.
 XX
 XX Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JB;
 PI WPI; 2001-280428/29.
 DR
 XX
 XX Composition containing bis-indocyanine dye and carrier, useful in
 PT diagnosis and therapy, e.g. of tumors, with the dye resistant to
 PT aggregation.
 XX
 XX Example 9; Col 13; 15pp; English.
 PS
 XX The invention relates to compositions comprising a hydrophilic bis-
 CC indocyanine dye with a heterocyclic group in the polymethylene chain, and a
 CC pharmacaceutically acceptable carrier or excipient. The invention also
 CC relates to diagnostic and therapeutic methods that involve administering
 CC the bis-indocyanine dye compositions to a human; and a method for making
 CC compositions of the invention by conjugating dyes to peptides or
 CC biomolecules by solid phase synthesis. The bis-indocyanine dye
 CC compositions are useful for optical tomographic imaging of organs;
 CC monitoring organ function; coronary angiography; fluorescent endoscopy;
 CC detection, imaging and therapy (photodynamic or localised) of tumours;
 CC laser-guided surgery (particularly for detecting micrometastases during
 CC laparoscopy); and photoacoustic and somofluorescent methods. A particular
 CC application is diagnosis of atherosclerotic plaques and blood clots.
 CC Also, measuring the pattern of blood clearance of a composition of the
 CC invention can be used for diagnosis of tumours and other diseases. The
 CC bis-indocyanine dyes are designed not to aggregate in solution (by
 CC preventing intra- and inter-molecular hydrophobic interactions); to have
 CC many attachment sites near to the chromophore for formation of a
 CC dendrimer; to allow easy conjugation to biomolecules; and to have a rigid
 CC and extended chromophore backbone that enhances the fluorescent quantum
 CC yield and extends the absorbance maximum to beyond 800 nm. Sequences
 CC AAB73421-AAB73426 represent synthetic peptides used in an exemplification
 CC to illustrate the use of bis-indocyanine dyes of the invention to prepare
 CC bioconjugates. The present sequence represents a bombesin analogue
 CC peptide
 XX
 SQ Sequence 11 AA;
 Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XXXXXVXHL 8
 Db 3 GQMAVGH 10
 RESULT 158
 AAB73423
 ID AAB73423 standard; peptide; 11 AA.
 AC AAB73423;
 XX
 XX 25-JUN-2001 (first entry)
 DT

XX Bombesin analogue peptide, SEQ ID NO:3.
 DE Bombesin analogue; bioconjugate; bis-indocyanine dye; hydrophilic;
 XX optical diagnostic imaging; tumour detection; cancer; endoscopy;
 KM coronary angiography; atherosclerotic plaque; blood clot.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT Modified-site 11
 FT /note= "C-terminal amide"
 XX
 XX US6183726-B1.
 XX
 XX 06-FEB-2001.
 XX
 XX 18-JAN-2000; 2000US-00484321.
 XX
 XX 18-JAN-2000; 2000US-00484321.
 XX
 XX (MLCW) MALLINCKRODT INC.
 XX
 XX Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JE;
 XX WPI; 2001-280426/29.
 XX
 XX Composition containing bis-indocyanine dye and carrier, useful in
 PT diagnosis and therapy, e.g. of tumours, with the dye resistant to
 PT aggregation.
 XX
 PS Example 9; Col 13; 15pp; English.
 XX
 XX The invention relates to compositions comprising a hydrophilic bis-
 CC indocyanine dye with a heterocyclic group in the polymethine chain, and a
 CC pharmaceutically acceptable carrier or excipient. The invention also
 CC relates to diagnostic and therapeutic methods that involve administering
 CC the bis-indocyanine dye compositions to a human; and a method for making
 CC compositions of the invention by conjugating dyes to peptides or
 CC biomolecules by solid phase synthesis. The bis-indocyanine dye
 CC compositions are useful for optical tomographic imaging of organs;
 CC monitoring organ function; coronary angiography; fluorescent endoscopy;
 CC laser-guided surgery (particularly for detecting micrometastases during
 CC laparoscopy); and photoacoustic and sonofluorescent methods. A particular
 CC application is diagnosis of atherosclerotic plaques and blood clots.
 CC Also, measuring the pattern of blood clearance of a composition of the
 CC invention can be used for diagnosis of tumours and other diseases. The
 CC bis-indocyanine dyes are designed not to aggregate in solution (by
 CC preventing intra- and inter-molecular hydrophobic interactions); to have
 CC many attachment sites near to the chromophore for formation of a
 CC dendrimer; to allow easy conjugation to biomolecules; and to have a rigid
 CC and extended chromophore backbone that enhances the fluorescent quantum
 CC yield and extends the absorbance maximum to beyond 800 nm. Sequences
 CC AAH73321-AAH73426 represent synthetic peptides used in an exemplification
 CC to illustrate the use of bis-indocyanine dyes of the invention to prepare
 CC bioconjugates. The present sequence represents a bombesin analogue
 CC peptide
 CC
 XX
 SQ Sequence 11 AA;
 Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 XQXXVXHL 8
 :|::|:
 Db 3 GQNAVGH 10
 RESULT 159
 AAU07321
 ID AAU07321 standard; peptide: 11 AA.

XX AAU07321;
 AC " "
 XX 07-NOV-2001 (first entry)
 DT
 XX Bombesin analogue #2.
 DE
 XX Bombesin; cytostatic; cyanine dye bioconjugate; diagnostic imaging;
 KM optical tomography; fluorescence endoscopy; micrometastases; tumour;
 KM blood clearance profile monitoring; laser-assisted guided surgery;
 KM somatostatin subtype-2 positive tumour; SST2; atherosclerotic plaque;
 KM blood clot; photodynamic therapy; coronary angiography; photoacoustic;
 KM sonofluorescent; starburst dendrimer.
 XX
 XX Synthetic.
 XX
 XX Key Location/Qualifiers
 FT Modified-site 11
 FT /note= "C-terminal amide"
 XX
 XX WO200152744-A1.
 XX
 XX 26-JUL-2001.
 XX
 XX 17-JAN-2001; 2001WO-US001468.
 XX
 XX 18-JAN-2000; 2000US-00484319.
 XX
 XX 09-JAN-2001; 2001US-00757332.
 XX
 XX (MLCW) MALLINCKRODT INC.
 XX
 XX Achillefu SI, Rajagopalan R, Dorshow RB, Bugaj JE;
 XX WPI; 2001-536388/59.
 XX
 XX Cyanine dye bioconjugates, used for diagnostic imaging and therapy in
 PT e.g. optical tomography, fluorescence endoscopy, blood clearance
 PT monitoring, light scattering and photoacoustic imaging.
 XX
 PS Example 9; Page 33; 78pp; English.
 XX
 XX The invention relates to cyanine dye bioconjugates (1), used for
 CC diagnostic imaging and therapy. Also provided are methods for performing
 CC diagnostic or therapeutic procedures by administering (1) and a
 CC pharmaceutically acceptable carrier or excipient, activating (1) using
 CC light and performing the diagnostic or therapeutic procedure. (1) are
 CC used to perform diagnostic or therapeutic procedures including optical
 CC tomography or fluorescence endoscopy, blood clearance profile monitoring
 CC and laser-assisted guided surgery to detect micrometastases including
 CC somatostatin subtype-2 (SST-2) positive tumours. They are used to
 CC diagnose atherosclerotic plaques and blood clots; to administer localised
 CC therapy including photodynamic therapy; to visualise and detect tumours;
 CC They are also used in various biomedical applications including
 CC tomographic imaging of organs, monitoring of organ functions, coronary
 CC angiography, fluorescence endoscopy, detection, imaging and therapy of
 CC tumours, laser-assisted guided surgery, photoacoustic methods and
 CC sonofluorescent methods. (1) form starburst dendrimers that prevent
 CC aggregation in solution by preventing intermolecular and intermolecular
 CC ordered hydrophobic interactions and have multiple attachment sites near
 CC to the dye chromophore for ease of forming bioactive molecules. The
 CC presence of rigid and extended chromophore backbones enhances their
 CC fluorescence quantum yield and extends their maximum absorption beyond
 CC 800 nm. Conjugation of biomolecules is readily achievable. The present
 CC sequence represents the amino acid sequence of bombesin analogue #2, used
 CC in the method of the invention
 CC
 XX
 SQ Sequence 11 AA;
 Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 XQXXVXHL 8
 :|::|:
 Db 3 GQNAVGH 10
 RESULT 159
 AAU07321
 ID AAU07321 standard; peptide: 11 AA.

Db :|:|:|:|
3 GQWAVGHL 10

RESULT 160
AAU07320 standard; peptide; 11 AA.
AAU07320;
07-NOV-2001 (first entry)

Bombesin analogue #1.
Bombesin; cytosstatic; cyanine dye bioconjugate; diagnostic imaging;
optical tomography; fluorescence endoscopy; micrometastasis; tumour;
blood clearance profile monitoring; laser-assisted guided surgery;
somatostatin subtype-2 positive tumour; SSTR2; atherosclerotic plaque;
blood clot; photodynamic therapy; coronary angiography; photoacoustic;
sonofluorescent; starburst dendrimer.

Synthetic.
Key Location/Qualifiers
Modified-site 11
/note= "C-terminal amide"

WO200152744-A1.
26-JUL-2001.
17-JAN-2001; 2001WO-US001468.
18-JAN-2000; 2000US-00484319.
09-JAN-2001; 2001US-00757332.
(MLCW) MALLINCKRODT INC.
Achillefu SI, Rajagopalan R, Dorshow RB, Bugaj JE;
WPI; 2001-536388/59.

Cyanine dye bioconjugates, used for diagnostic imaging and therapy in
e.g. optical tomography, fluorescence endoscopy, blood clearance
monitoring, light scattering and photoacoustic imaging.

Example 9; Page 33; 78pp; English.

The invention relates to cyanine dye bioconjugates (I), used for
diagnostic imaging and therapy. Also provided are methods for performing
diagnostic or therapeutic procedures by administering (I) and a
pharmaceutically acceptable carrier or excipient, activating (I) using
light and performing the diagnostic or therapeutic procedure. (I) are
used to perform diagnostic or therapeutic procedures including optical
tomography or fluorescence endoscopy, blood clearance profile monitoring
and laser-assisted guided surgery to detect micrometastases including
somatostatin subtype-2 (SSTR-2) positive tumours. They are used to
diagnose atherosclerotic plaques and blood clots; to administer localised
therapy including photodynamic therapy; to visualise and detect tumours;
They are also used in various biomedical applications including
tomographic imaging or organs, monitoring of organ functions, coronary
angiography, fluorescence endoscopy, detection, imaging and therapy of
tumours, laser-assisted guided surgery, photoacoustic methods and
sonofluorescent methods. (I) form starburst dendrimers that prevent
aggregation in solution by preventing intramolecular and intermolecular
ordered hydrophobic interactions and have multiple attachment sites near
to the dye chromophore for ease of forming bioactive molecules. The
presence of rigid and extended chromophore backbones enhances their
fluorescence quantum yield and extends their maximum absorption beyond
800 nm. Conjugation of biomolecules is readily achievable. The present
sequence represents the amino acid sequence of bombesin analogue #1, used
in the method of the invention

SQ Sequence 11 AA;
Query Match 100.0%; Score 25; DB 4; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXXVXHL 8
:|:|:|:|
3 GQWAVGHL 10

RESULT 161
AAG67682 standard; peptide; 11 AA.
AAG67682;
26-NOV-2001 (first entry)

Amino acid sequence of a synthetic analogue of bombesin.
Fluorescence; organic solvent; indocyanine dye; imaging; disease therapy;
optical diagnostic imaging; endoscopy; tumour;
photoacoustic tumour imaging; sonofluorescence tumour imaging; bombesin.

Synthetic.
Key Location/Qualifiers
Modified-site 11
/note= "this residue is amidated"

US6264920-B1.
24-JUL-2001.
10-AUG-2000; 2000US-00637518.
18-JAN-2000; 2000US-00484320.
(MLCW) MALLINCKRODT INC.
Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JE;
WPI; 2001-569877/64.

In vivo or in vitro fluorescence is restored by adding biocompatible
organic solvents to new indocyanine dye compositions.

Example 7; Col 15; 15pp; English.

The specification describes a method for the restoration of in vivo or in
vitro fluorescence. The method involves adding biocompatible organic
solvents to compositions of indocyanine dyes. The dyes are of a formula
given in the specification. The dyes prevent aggregation in solution, are
desirable for form dendrimers, absorb or emit beyond 800 nm, possess
desirable photophysical properties, and show tissue-specific targeting
capabilities. The method is used for imaging, diagnosis and therapy of
various disease (particularly for optical diagnostic imaging and therapy,
in endoscopic applications for the detection of tumours and other
abnormalities, for localized therapy, photoacoustic tumour imaging,
detection and therapy, and sonofluorescence tumour imaging, detection and
therapy). The present sequence represents a bombesin analogue, which may
be conjugated to dyes of the invention

Sequence 11 AA;
Query Match 100.0%; Score 25; DB 4; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXXVXHL 8
:|:|:|:|
3 GQWAVGHL 10

RESULT 162

AAG67681 ID AAG67681 standard; peptide; 11 AA.

AC AAG67681;

DT 26-NOV-2001 (first entry)

XX Amino acid sequence of a synthetic analogue of bombesin.

XX Fluorescence; organic solvent; indocyanine dye; imaging; disease therapy;

KM optical diagnostic imaging; endoscopy; tumour;

KM photoacoustic tumour imaging; sonofluorescence tumour imaging; bombesin.

XX Synthetic.

OS Synthetic.

FH Key Location/Qualifiers

FT Modified-site 11 /note="this residue is amidated"

XX US6264920-B1.

XX 24-JUL-2001.

XX 10-AUG-2000; 2000US-00637518.

XX 18-JAN-2000; 2000US-00484320.

XX (MLCW) MALLINCKRODT INC.

XX PI Achillefu S, Rajagopalan R, Dorehow RB, Bugaj JE;

XX WPI; 2001-569877/64.

XX In vivo or in vitro fluorescence is restored by adding biocompatible

XX organic solvents to new indocyanine dye compositions.

XX Example 7; Col 15; 15pp; English.

XX The specification describes a method for the restoration of in vivo or in

XX vitro fluorescence. The method involves adding biocompatible organic

XX solvents to compositions of indocyanine dyes. The dyes are of a formula

XX given in the specification. The dyes prevent aggregation in solution, are

XX predisposed to form dendrimers, absorb or emit beyond 800 nm, possess

XX desirable photophysical properties, and show tissue-specific targeting

XX capabilities. The method is used for imaging, diagnosis and therapy of

XX various diseases (particularly for optical diagnostic imaging and therapy,

XX in endoscopic applications for the detection of tumours and other

XX abnormalities, for localized therapy, photoacoustic tumour imaging,

XX detection and therapy, and sonofluorescence tumour imaging, detection and

XX therapy). The present sequence represents a bombesin analogue, which may

XX be conjugated to dyes of the invention

XX Sequence 11 AA;

XX

XX

XX

XX

XX Bombesin analogue peptide used to synthesise peptide dye bioconjugate #1.

DE Cyanine dye bioconjugates; therapy; tumour detection; optical tomography;

XX Fluorescence endoscopy; blood clearance profile monitoring; cytosolic;

XX laser-assisted guided surgery; micrometastasis; somatostatin subtype-2;

XX SGT-2; atherosclerosis; photodynamic therapy; organ function monitoring;

XX tomographic imaging; coronary angiography; imaging; blood clot; bombesin.

XX Synthetic.

OS Synthetic.

FH Key Location/Qualifiers

FT Modified-site 11 /note="C-terminal amide"

XX WO200152746-A1.

XX 26-JUL-2001.

XX 17-JAN-2001; 2001WO-US01471.

XX 18-JAN-2000; 2000US-00484321.

XX 09-JAN-2001; 2001US-00757333.

XX (MLCW) MALLINCKRODT INC.

XX PI Achillefu SI, Rajagopalan R, Dorehow RB, Bugaj JE;

XX WPI; 2001-502594/55.

XX The invention relates to compositions of cyanine dye bioconjugates with

XX bioactive molecules for diagnosis and therapy, particularly, for

XX visualisation and detection of tumours. Cyanine dye bioconjugates are

XX used to perform diagnostic or therapeutic procedures including optical

XX tomography or fluorescence endoscopy, blood clearance profile monitoring

XX and laser-assisted guided surgery to detect micrometastases including

XX somatostatin subtype-2 (SGT-2) positive tumours. They are used to

XX diagnose atherosclerotic plaques and blood clots. They are used to

XX administer localised therapy including photodynamic therapy. They are

XX used in various biomedical applications including tomographic imaging of

XX organs, monitoring of organ functions, coronary angiography, detection,

XX imaging and therapy of tumours, photoacoustic methods and sonofluorescent

XX methods. The present sequence is a bombesin analogue peptide used in the

XX synthesis of peptide dye bioconjugates

XX Sequence 11 AA;

XX

XX

XX

XX

XX

XX

KM fluorescence endoscopy; blood clearance profile monitoring; cyrostatic;
 KM laser-assisted guided surgery; micrometastasis; somatostatin subtype-2;
 KM SST-2; atherosclerosis; photodynamic therapy; organ function monitoring;
 KM tomographic imaging; coronary angiography; imaging; blood clot; bombesin.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT Modified-site 11
 FT /note= "C-terminal amide"
 XX
 XX W0200152746-A1.
 XX
 XX 26-JUL-2001.
 XX
 XX 17-JAN-2001; 2001WO-US001471.
 XX
 XX 18-JAN-2000; 2000US-00484321.
 XX 09-JAN-2001; 2001US-00757333.
 XX
 XX (MLCW) MALLINCKRODT INC.
 XX
 XX Achillefu SI, Rajagopalan R, Dorshow RB, Bugaj JE;
 XX WPI; 2001-502594/55.
 XX
 XX Cyanine dye bioconjugates, used for diagnostic imaging and therapy in
 PT e.g. optical tomography, fluorescence endoscopy, blood clearance
 PT monitoring, light scattering and photoacoustic imaging.
 XX
 XX Example 9; Page 34; 77pp; English.
 XX
 XX The invention relates to compositions of cyanine dye bioconjugates with
 CC bioactive molecules for diagnosis and therapy, particularly, for
 CC visualisation and detection of tumours. Cyanine dye bioconjugates are
 CC used to perform diagnostic or therapeutic procedures including optical
 CC tomography or fluorescence endoscopy, blood clearance profile monitoring
 CC and laser-assisted guided surgery to detect micrometastases including
 CC somatostatin subtype-2 (SST-2) positive tumours. They are used to
 CC diagnose atherosclerotic plaques and blood clots. They are used to
 CC administer localised therapy including photodynamic therapy. They are
 CC used in various biomedical applications including tomographic imaging of
 CC organs, monitoring of organ functions, coronary angiography, detection,
 CC imaging and therapy of tumours, photoacoustic methods and sonofluorescent
 CC methods. The present sequence is a bombesin analogue peptide used in the
 CC synthesis of peptide dye bioconjugates
 XX
 XX Sequence 11 AA;
 SQ
 Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 XQXXVXHL 8
 Db :|::|:|
 3 GQWAVGHL 10
 RESULT 165
 AAB73428 standard; peptide; 11 AA.
 XX
 XX AAB73428;
 XX
 XX 25-JUN-2001 (first entry)
 XX
 XX Bombesin analogue peptide, SEQ ID NO:2.
 XX
 XX Bombesin analogue; bioconjugate; bis-indocyanine dye; hydrophilic;
 KM optical diagnostic imaging; tumour detection; cancer; endoscopy;
 KM coronary angiography; atherosclerotic plaque; blood clot.
 XX
 OS Synthetic.

XX
 XX Key Location/Qualifiers
 FT Modified-site 11
 FT /note= "C-terminal amide"
 XX
 XX US6190641-B1.
 XX
 XX 20-FEB-2001.
 XX
 XX 18-JAN-2000; 2000US-00484323.
 XX
 XX 18-JAN-2000; 2000US-00484323.
 XX
 XX 18-JAN-2000; 2000US-00484323.
 XX
 XX (MLCW) MALLINCKRODT INC.
 XX
 XX Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JE;
 XX WPI; 2001-280460/29.
 XX
 XX Novel indocyanine dyes that absorb and emit light in near infrared region
 PT of electromagnetic spectrum, useful for imaging, diagnosis and therapy of
 PT various diseased states.
 XX
 XX Example 9; Col 14; 15pp; English.
 XX
 XX The invention relates to compositions comprising a hydrophilic bis-
 CC indocyanine dye with a heterocyclic group in the polymethine chain, and a
 CC pharmaceutically acceptable carrier or excipient. The invention also
 CC relates to diagnostic and therapeutic methods that involve administering
 CC the bis-indocyanine dye compositions to a human; and a method for making
 CC compositions of the invention by conjugating dyes to peptides or
 CC biomolecules by solid phase synthesis. The bis-indocyanine dye
 CC compositions are useful for optical tomographic imaging of organs;
 CC monitoring organ function; coronary angiography; fluorescent endoscopy;
 CC detection, imaging and therapy (photodynamic or localised) of tumours;
 CC laser-guided surgery (particularly for detecting micrometastases during
 CC laparoscopy); and photoacoustic and sonofluorescent methods. A particular
 CC application is diagnosis of atherosclerotic plaques and blood clots.
 CC Also, measuring the pattern of blood clearance of a composition of the
 CC invention can be used for diagnosis of tumours and other diseases. The
 CC bis-indocyanine dyes are designed not to aggregate in solution (by
 CC preventing intra- and inter-molecular hydrophobic interactions); to have
 CC many attachment sites near to the chromophore for formation of a
 CC dendrimer; to allow easy conjugation to biomolecules; and to have a rigid
 CC and extended chromophore backbone that enhances the fluorescent quantum
 CC yield and extends the absorbance maximum to beyond 800 nm. Sequences
 CC AAB73427-AAB73432 represent synthetic peptides used in an exemplification
 CC to illustrate the use of bis-indocyanine dyes of the invention to prepare
 CC bioconjugates. The present sequence represents a bombesin analogue
 CC peptide
 XX
 XX Sequence 11 AA;
 SQ
 Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 XQXXVXHL 8
 Db :|::|:|
 3 GQWAVGHL 10
 RESULT 166
 AAB73429 standard; peptide; 11 AA.
 XX
 XX AAB73429;
 XX
 XX 25-JUN-2001 (first entry)
 XX
 XX Bombesin analogue peptide, SEQ ID NO:3.
 XX
 XX Bombesin analogue; bioconjugate; bis-indocyanine dye; hydrophilic;
 KM

KW optical diagnostic imaging; tumour detection; cancer; endoscopy;
 KW coronary angiography; atherosclerotic plaque; blood clot.
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 XX Modified-site 11
 FT /note= "C-terminal amide"
 XX
 XX US6190641-B1.
 XX
 XX 20-FEB-2001.
 XX
 XX 18-JAN-2000; 2000US-00484323.
 XX
 XX 18-JAN-2000; 2000US-00484323.
 XX
 XX (MLCW) MALLINCKRODT INC.
 XX
 XX Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JE;
 XX WPI; 2001-280460/29.
 XX
 XX Novel indocyanine dyes that absorb and emit light in near infrared region
 XX of electromagnetic spectrum, useful for imaging, diagnosis and therapy of
 XX various diseased states.
 XX
 XX Example 9; Col 14; 15pp; English.
 XX
 XX The invention relates to compositions comprising a hydrophilic bis-
 XX indocyanine dye with a heterocyclic group in the polymethine chain, and a
 XX pharmaceutically acceptable carrier or excipient. The invention also
 XX relates to diagnostic and therapeutic methods that involve administering
 XX the bis-indocyanine dye compositions to a human; and a method for making
 XX compositions of the invention by conjugating dyes to peptides or
 XX biomolecules by solid phase synthesis. The bis-indocyanine dye
 XX compositions are useful for optical tomographic imaging of organs;
 XX monitoring organ function; coronary angiography; fluorescent endoscopy;
 XX detection, imaging and therapy (photodynamic or localised) of tumours;
 XX laser-guided surgery (particularly for detecting metastases during
 XX laparoscopy); and photoacoustic and sonofluorescent methods. A particular
 XX application is diagnosis of atherosclerotic plaques and blood clots.
 XX Also, measuring the pattern of blood clearance of a composition of the
 XX invention can be used for diagnosis of tumours and other diseases. The
 XX bis-indocyanine dyes are designed not to aggregate in solution (by
 XX preventing intra- and inter-molecular hydrophobic interactions); to have
 XX many attachment sites near to the chromophore for formation of a
 XX dendrimer; to allow easy conjugation to biomolecules; and to have a rigid
 XX and extended chromophore backbone that enhances the fluorescent quantum
 XX yield and extends the absorbance maximum to beyond 800 nm. Sequences
 XX AA673427-AA673432 represent synthetic peptides used in an exemplification
 XX to illustrate the use of bis-indocyanine dyes of the invention to prepare
 XX bioconjugates. The present sequence represents a bombesin analogue
 XX peptide
 XX
 XX
 XX Sequence 11 AA;
 SQ
 Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 Db 3 GQMAVGH 10
 RESULT 167
 AA65285
 ID AA65285 standard; peptide; 11 AA.
 XX
 XX AA65285;
 XX
 XX 30-NOV-2001 (first entry)
 DT

XX Bombesin analogue peptide sequence 2.
 DE
 XX Fluorescence; biocompatible; indocyanine; dye; therapy; endoscopic;
 KW optical diagnostic imaging; tumour; photoacoustic tumor imaging;
 KW sonofluorescence; octreotide; bombesin.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 XX Modified-site 11
 FT /note= "C-terminal amide"
 XX
 XX US6264919-B1.
 XX
 XX 24-JUL-2001.
 XX
 XX 10-AUG-2000; 2000US-00636170.
 XX
 XX 18-JAN-2000; 2000US-00484323.
 XX
 XX (MLCW) MALLINCKRODT INC.
 XX
 XX Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JE;
 XX WPI; 2001-556569/62.
 XX
 XX In vivo or in vitro fluorescence is restored by adding biocompatible
 XX organic solvents to new indocyanine dye compositions.
 XX
 XX Example 9; Col 13; 14pp; English.
 XX
 XX The invention relates to restoration of in vivo or in vitro fluorescence
 XX that involves adding biocompatible organic solvents to compositions of
 XX indocyanine dyes. The dyes are of specified formula indicated in the
 XX specification. The method is useful for imaging, diagnosis and therapy of
 XX various disease (particularly for optical diagnostic imaging and therapy,
 XX in endoscopic applications for the detection of tumors and other
 XX abnormalities, for localized therapy, photoacoustic tumor imaging,
 XX detection and therapy, and sonofluorescence tumor imaging, detection and
 XX therapy). The dyes prevent aggregation in solution, are predisposed to
 XX form dendrimers, absorb or emit beyond 800 nm, possess desirable
 XX photophysical properties, and show tissue-specific targeting
 XX capabilities. The present sequence represents an analogue of bombesin
 XX
 XX
 XX Sequence 11 AA;
 SQ
 Query Match 100.0%; Score 25; DB 4; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 Db 3 GQMAVGH 10
 RESULT 168
 AA65284
 ID AA65284 standard; peptide; 11 AA.
 XX
 XX AA65284;
 XX
 XX 30-NOV-2001 (first entry)
 DT
 DE Bombesin analogue peptide sequence 1.
 XX
 XX Fluorescence; biocompatible; indocyanine; dye; therapy; endoscopic;
 KW optical diagnostic imaging; tumour; photoacoustic tumor imaging;
 KW sonofluorescence; octreotide; bombesin.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 XX

```
FT Modified-site 11
FT /note= "C-terminal amide"
XX
XX US6264919-B1.
XX
XX 24-JUL-2001.
XX
XX 10-AUG-2000; 2000US-00636170.
XX
XX 18-JAN-2000; 2000US-00484323.
XX
XX (MLCW ) MALLINCKRODT INC.
XX
XX Achillefu S, Rajagopalan R, Dorshow RB, Bugaj JE;
XX WPI; 2001-556569/62.
XX
XX In vivo or in vitro fluorescence is restored by adding biocompatible
XX organic solvents to new indocyanine dye compositions.
XX
XX Example 9; Col 13; 14pp; English.
XX
XX The invention relates to restoration of in vivo or in vitro fluorescence
XX that involves adding biocompatible organic solvents to compositions of
XX indocyanine dyes. The dyes are of specified formula indicated in the
XX specification. The method is useful for imaging, diagnosis and therapy of
XX various disease (particularly for optical diagnostic imaging and therapy,
XX in endoscopic applications for the detection of tumors and other
XX abnormalities, for localized therapy, photoacoustic tumor imaging,
XX detection and therapy, and sonofluorescence tumor imaging, detection and
XX therapy). The dyes prevent aggregation in solution, are predisposed to
XX form dendrimers, absorb or emit beyond 800 nm, possesses desirable
XX photophysical properties, and show tissue-specific targeting
XX capabilities. The present sequence represents an analogue of bombesin
XX
XX Sequence 11 AA;
SQ
Query Match 100.0%; Score 25; DB 4; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
Db :.:.:|
3 GQMAVGHLL 10
RESULT 169
AAU97454
ID AAU97454 standard; peptide; 11 AA.
XX
XX AAU97454;
AC
XX 13-AUG-2002 (first entry)
DT
XX
XX Synthetic bombesin analogue peptide #1.
DE
XX
XX Cyanine dye bioconjugate; optical tomography; fluorescence endoscopy;
XX atherosclerotic plaque; blood clot; laser assisted guided surgery;
XX micrometastases; starburst dendrimer; tissue-specific; light emission;
XX peptide-dye conjugate; light absorption; near infrared region; bombesin.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
XX Modified-site 11
XX /note= "C-terminal amide"
XX
XX US2002044909-A1.
XX
XX 18-APR-2002.
XX
XX 23-MAY-2001; 2001US-00863971.
XX
```

```
PR 18-JAN-2000; 2000US-00484320.
XX
XX (MLCW ) MALLINCKRODT INC.
XX
XX Achillefu SI, Rajagopalan R, Dorshow RB, Bugaj JE;
XX WPI; 2002-434588/46.
XX
XX New cyanine dye bioconjugates, useful in performing diagnostic and
XX therapeutic procedures including optical tomography and fluorescence
XX endoscopy.
XX
XX Example 9; Page 8; 31pp; English.
XX
XX The present invention relates to new cyanine dye bioconjugates. The
XX bioconjugates of the invention are useful in performing diagnostic and
XX therapeutic procedures including optical tomography and fluorescence
XX endoscopy. The method is capable of diagnosing atherosclerotic plaques
XX and blood clots and is useful in laser assisted guided surgery for the
XX detection of micrometastases. The molecules of the invention preserve the
XX fluorescence efficiency of the dye molecules, do not aggregate in
XX solution, form starburst dendrimers, are capable of absorbing or emitting
XX light in the near infrared region and can be rendered tissue-specific.
XX The present amino acid sequence represents synthetic bombesin analogue
XX peptide #1 that was used in the methods of the invention for synthesis of
XX peptide-dye conjugates
XX
XX Sequence 11 AA;
SQ
Query Match 100.0%; Score 25; DB 5; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHL 8
Db :.:.:|
3 GQMAVGHLL 10
RESULT 170
AAU97455
ID AAU97455 standard; peptide; 11 AA.
XX
XX AAU97455;
AC
XX 13-AUG-2002 (first entry)
DT
XX
XX Synthetic bombesin analogue peptide #2.
DE
XX
XX Cyanine dye bioconjugate; optical tomography; fluorescence endoscopy;
XX atherosclerotic plaque; blood clot; laser assisted guided surgery;
XX micrometastases; starburst dendrimer; tissue-specific; light emission;
XX peptide-dye conjugate; light absorption; near infrared region; bombesin.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
XX Modified-site 11
XX /note= "C-terminal amide"
XX
XX US2002044909-A1.
XX
XX 18-APR-2002.
XX
XX 23-MAY-2001; 2001US-00863971.
XX
XX 18-JAN-2000; 2000US-00484320.
XX
XX (MLCW ) MALLINCKRODT INC.
XX
XX Achillefu SI, Rajagopalan R, Dorshow RB, Bugaj JE;
XX WPI; 2002-434588/46.
XX
```


PT New cyanine dye bioconjugates, useful in performing diagnostic and
PT therapeutic procedures including optical tomography and fluorescence
XX endoscopy.
XX
XX Example 9; Page 8; 31pp; English.
XX
CC The present invention relates to new cyanine dye bioconjugates. The
CC bioconjugates of the invention are useful in performing diagnostic and
CC therapeutic procedures, including optical tomography and fluorescence
CC endoscopy. The method is capable of diagnosing atherosclerotic plaques
CC and blood clots and is useful in laser assisted guided surgery for the
CC detection of micrometastases. The molecules of the invention preserve the
CC fluorescence efficiency of the dye molecules, do not aggregate in
CC solution, form starburst dendrimers, are capable of absorbing or emitting
CC light in the near infrared region and can be rendered tissue-specific.
CC The present amino acid sequence represents synthetic bombesin analogue
CC peptide #2 that was used in the methods of the invention for synthesis of
CC peptide-dye conjugates
XX
SO Sequence 11 AA;
XX
Query Match 100.0%; Score 25; DB 5; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XXXXVXHL 8
DB 3 GQWAVGHL 10
XX
RESULT 171
ABU09468
ID ABU09468 standard; peptide; 11 AA.
XX
AC ABU09468;
XX
DT 26-JUN-2003 (first entry)
XX
DE Bombesin analogue #2 peptide used for cyanine dye bioconjugation.
XX
XX Bioconjugate; cyanine dye; atherosclerotic plaque; bombesin; tumour;
KM blood clot; laser assisted guided surgery; endoscopy;
KM micrometastasis detection; somatostatin subtype 2 positive tumour;
KM optical tomography; photoacoustic application; starburst dendrimer;
KM sonofluorescent application; tissue-specific.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 11 /note= "C-terminal amide"
XX
XX US2002156117-A1.
XX
PD 24-OCT-2002.
XX
PF 23-MAY-2001; 2001US-00864011.
XX
PR 18-JAN-2000; 2000US-00484322.
XX
PA (MLCW) MALLINCKRODT INC.
XX
PI Achillefu SI, Rajagopalan R, Dorshow RB, Bugaj JE;
XX
DR WPI; 2003-379807/36.
XX
PT New cyanine dye bioconjugates useful for e.g. the diagnosis and therapy
PT of tumors in association with e.g. optical tomographic, endoscopic,
PT photoacoustic and sonofluorescent applications.
XX
XX Example 9; Page 9; 29pp; English.
XX
CC The invention relates to cyanine dye bioconjugates. Cyanine dye

CC bioconjugates are used for performing a diagnostic or therapeutic
CC procedure i.e. diagnosing atherosclerotic plaques and blood clots and for
CC laser assisted guided surgery for the detection of micrometastases e.g.
CC somatostatin subtype 2 positive tumours. Also used for optical
CC tomographic, endoscopic, photoacoustic and sonofluorescent applications
CC for the detection and treatment of tumours and other abnormalities. The
CC composition comprising cyanine dye bioconjugates preserves the
CC fluorescence efficiency of the dye molecules, does not aggregate in
CC solution, forms starburst dendrimers and is capable of absorbing or
CC emitting light in the near infrared region (beyond 800 nm) and can be
CC rendered tissue-specific. Conjugation of biomolecules to the cyanine dyes
CC is readily achievable. The present sequence represents the amino acid
CC sequence of the bombesin analogue #2 peptide used for cyanine dye
CC bioconjugation
XX
SO Sequence 11 AA;
XX
Query Match 100.0%; Score 25; DB 6; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XXXXVXHL 8
DB 3 GQWAVGHL 10
XX
RESULT 172
ABU09467
ID ABU09467 standard; peptide; 11 AA.
XX
AC ABU09467;
XX
DT 26-JUN-2003 (first entry)
XX
DE Bombesin analogue #1 peptide used for cyanine dye bioconjugation.
XX
XX Bioconjugate; cyanine dye; atherosclerotic plaque; bombesin; tumour;
KM blood clot; laser assisted guided surgery; endoscopy;
KM micrometastasis detection; somatostatin subtype 2 positive tumour;
KM optical tomography; photoacoustic application; starburst dendrimer;
KM sonofluorescent application; tissue-specific.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 11 /note= "C-terminal amide"
XX
XX US2002156117-A1.
XX
PD 24-OCT-2002.
XX
PF 23-MAY-2001; 2001US-00864011.
XX
PR 18-JAN-2000; 2000US-00484322.
XX
PA (MLCW) MALLINCKRODT INC.
XX
PI Achillefu SI, Rajagopalan R, Dorshow RB, Bugaj JE;
XX
DR WPI; 2003-379807/36.
XX
PT New cyanine dye bioconjugates useful for e.g. the diagnosis and therapy
PT of tumors in association with e.g. optical tomographic, endoscopic,
PT photoacoustic and sonofluorescent applications.
XX
XX Example 9; Page 9; 29pp; English.
XX
CC The invention relates to cyanine dye bioconjugates. Cyanine dye
CC bioconjugates are used for performing a diagnostic or therapeutic
CC procedure i.e. diagnosing atherosclerotic plaques and blood clots and for
CC laser assisted guided surgery for the detection of micrometastases e.g.
CC somatostatin subtype 2 positive tumours. Also used for optical

CC tomographic, endoscopic, photoacoustic and sonofluorescent applications
CC for the detection and treatment of tumours and other abnormalities. The
CC composition comprising cyanine dye bioconjugates preserves the
CC fluorescence efficiency of the dye molecules, does not aggregate in
CC solution, forms stablurst dendrimers and is capable of absorbing or
CC emitting light in the near infrared region (beyond 800 nm) and can be
CC rendered tissue-specific. Conjugation of biomolecules to the cyanine dyes
CC is readily achievable. The present sequence represents the amino acid
CC sequence of the bombesin analogue #1 peptide used for cyanine dye
CC bioconjugation
XX
SQ Sequence 11 AA;
Query Match 100.0%; Score 25; DB 6; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
: : : : :
Db 3 GQWAVGHL 10
RESULT 173
ABR42465
ID ABR42465 standard; peptide; 11 AA.
XX
AC ABR42465;
XX
DT 11-AUG-2003 (first entry)
XX
DE Bombesin analogue, used in carbocyanine dye bioconjugate.
XX
KM Bombesin; carbocyanine dye; cancer; photodiagnosis; phototherapy;
KM photodynamic therapy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 11
/note= "C-terminal amide"
XX
PN W02003032900-A2.
XX
PD 24-APR-2003.
XX
PF 07-OCT-2002; 2002WO-US031983.
XX
PR 17-OCT-2001; 2001US-00981206.
XX
PA (MLCW) MALLINCKRODT INC.
XX
PI Achillefu SI, Rajagopalan R, Bugaj JE, Dorshow RB;
XX
DR WPI; 2003-449176/42.
XX
PT New carbocyanine dye bioconjugates useful for diagnosis and therapy, e.g.
PT of tumors, micrometastases or atherosclerosis.
XX
PS Example 3; Page 19; 52pp; English.
XX
The present sequence is that of an analogue of bombesin, a peptide that
CC targets overexpressed receptors in neuroendocrine tumours. The analogue
CC can be used in novel conjugates of the invention. These conjugates
CC consist of a carbocyanine dye for visualization, a photosensitizer for
CC photodynamic treatment, and a tumour receptor-avid peptide for site-
CC specific delivery of the probe and phototoxic agent to diseased tissues.
CC They are useful for performing diagnostic or therapeutic procedures,
CC especially optical tomography, fluorescence endoscopy, procedures
CC involving imaging and therapy using absorption, light scattering,
CC photoacoustic and sonofluorescence techniques, diagnosis and treatment of
CC atherosclerotic plaques and blood clots, administering localised therapy,
CC photodynamic therapy and laser assisted guided surgery for detection and
CC treatment of micrometastases

XX
SQ Sequence 11 AA;
Query Match 100.0%; Score 25; DB 6; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
: : : : :
Db 3 GQWAVGHL 10
RESULT 174
ABR42464
ID ABR42464 standard; peptide; 11 AA.
XX
AC ABR42464;
XX
DT 11-AUG-2003 (first entry)
XX
DE Bombesin analogue, used in carbocyanine dye bioconjugate.
XX
KM Bombesin; carbocyanine dye; cancer; photodiagnosis; phototherapy;
KM photodynamic therapy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 11
/note= "C-terminal amide"
XX
PN W02003032900-A2.
XX
PD 24-APR-2003.
XX
PF 07-OCT-2002; 2002WO-US031983.
XX
PR 17-OCT-2001; 2001US-00981206.
XX
PA (MLCW) MALLINCKRODT INC.
XX
PI Achillefu SI, Rajagopalan R, Bugaj JE, Dorshow RB;
XX
DR WPI; 2003-449176/42.
XX
PT New carbocyanine dye bioconjugates useful for diagnosis and therapy, e.g.
PT of tumors, micrometastases or atherosclerosis.
XX
PS Example 3; Page 19; 52pp; English.
XX
The present sequence is that of an analogue of bombesin, a peptide that
CC targets overexpressed receptors in neuroendocrine tumours. The analogue
CC can be used in novel conjugates of the invention. These conjugates
CC consist of a carbocyanine dye for visualization, a photosensitizer for
CC photodynamic treatment, and a tumour receptor-avid peptide for site-
CC specific delivery of the probe and phototoxic agent to diseased tissues.
CC They are useful for performing diagnostic or therapeutic procedures,
CC especially optical tomography, fluorescence endoscopy, procedures
CC involving imaging and therapy using absorption, light scattering,
CC photoacoustic and sonofluorescence techniques, diagnosis and treatment of
CC atherosclerotic plaques and blood clots, administering localised therapy,
CC photodynamic therapy and laser assisted guided surgery for detection and
CC treatment of micrometastases
XX
SQ Sequence 11 AA;
Query Match 100.0%; Score 25; DB 6; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
: : : : :
Db 3 GQWAVGHL 10

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RESULT 175
ABR55703
ID ABR55703 standard; peptide; 11 AA.
XX
XX ABR55703;
AC
XX 02-SEP-2003 (first entry)
DT
XX Bombesin analogue peptide #1.
DE
XX
XX Indocyanine dye; bioconjugate; cytosstatic; antiarteriosclerotic;
KM anticogagulant; vasotropic; photodynamic therapy; bombesin.
XX
XX Synthetic.
OS
XX Key Location/Qualifiers
FH Modified-site 11
FT /note= "C-terminal amide"
FT
XX
XX WO2003032901-A2.
XX
XX 24-APR-2003.
XX
XX 07-OCT-2002; 2002WO-US032021.
XX
XX 17-OCT-2001; 2001US-00978725.
XX
XX (MLCW ) MALLINCKRODT INC.
XX
XX Achilleu SI, Rajagopalan R, Bugaj JB, Dorshow RB;
XX
XX WPI; 2003-430294/40.
XX
XX New indocyanine dye bioconjugates, useful in diagnostic and therapeutic
PT procedures, especially as targeted photodynamic therapeutic agent
PT containing visualizing, targeting and photosensitizing moieties.
XX
XX Example 3; Page 19; 51pp; English.
XX
XX The invention relates to indocyanine (or analogue) dye bioconjugates (I)
CC of specified formula. (I) are used in diagnostic or therapeutic
CC procedures, specifically procedures using light of wavelength 300-1300
CC nm, especially: optical tomography diagnostic procedures; fluorescence
CC endoscopy diagnostic procedures; procedures also involving imaging and
CC therapy by absorption, light scattering, sonofluorescence or
CC photoacoustic techniques; procedures for diagnosing and treating
CC atherosclerotic plaques and blood clots; procedures involving
CC administering local therapy; photodynamic therapy procedures; or laser
CC assisted guided surgery procedures for detection and treatment of
CC micrometastases. (I) are especially targeted optical agents including a
CC carbocyanine dye for visualization, photosensitizer for photodynamic
CC treatment and tumour receptor-avid peptide for site-specific delivery of
CC the probe and phototoxic agent to tumour tissues. The present sequence
CC represents a bombesin peptide analogue, a bioactive peptide used in the
CC bioconjugates of the invention
XX
XX
XX Sequence 11 AA;
SQ
Query Match 100.0%; Score 25; DB 6; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
DB 3 GQMAVGH 10

```

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AC ABR55704;
XX
XX 02-SEP-2003 (first entry)
DT
XX Bombesin analogue peptide #2.
DE
XX
XX Indocyanine dye; bioconjugate; cytosstatic; antiarteriosclerotic;
KM anticogagulant; vasotropic; photodynamic therapy; bombesin.
XX
XX Synthetic.
OS
XX Key Location/Qualifiers
FH Modified-site 11
FT /note= "C-terminal amide"
FT
XX
XX WO2003032901-A2.
XX
XX 24-APR-2003.
XX
XX 07-OCT-2002; 2002WO-US032021.
XX
XX 17-OCT-2001; 2001US-00978725.
XX
XX (MLCW ) MALLINCKRODT INC.
XX
XX Achilleu SI, Rajagopalan R, Bugaj JB, Dorshow RB;
XX
XX WPI; 2003-430294/40.
XX
XX New indocyanine dye bioconjugates, useful in diagnostic and therapeutic
PT procedures, especially as targeted photodynamic therapeutic agent
PT containing visualizing, targeting and photosensitizing moieties.
XX
XX Example 3; Page 19; 51pp; English.
XX
XX The invention relates to indocyanine (or analogue) dye bioconjugates (I)
CC of specified formula. (I) are used in diagnostic or therapeutic
CC procedures, specifically procedures using light of wavelength 300-1300
CC nm, especially: optical tomography diagnostic procedures; fluorescence
CC endoscopy diagnostic procedures; procedures also involving imaging and
CC therapy by absorption, light scattering, sonofluorescence or
CC photoacoustic techniques; procedures for diagnosing and treating
CC atherosclerotic plaques and blood clots; procedures involving
CC administering local therapy; photodynamic therapy procedures; or laser
CC assisted guided surgery procedures for detection and treatment of
CC micrometastases. (I) are especially targeted optical agents including a
CC carbocyanine dye for visualization, photosensitizer for photodynamic
CC treatment and tumour receptor-avid peptide for site-specific delivery of
CC the probe and phototoxic agent to tumour tissues. The present sequence
CC represents a bombesin peptide analogue, a bioactive peptide used in the
CC bioconjugates of the invention
XX
XX
XX Sequence 11 AA;
SQ
Query Match 100.0%; Score 25; DB 6; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHL 8
DB 3 GQMAVGH 10

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```

RESULT 176
ABR55704
ID ABR55704 standard; peptide; 11 AA.
XX

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RESULT 177
ABR44098
ID ABR44098 standard; peptide; 11 AA.
XX
XX ABR44098;
AC
XX 04-AUG-2003 (first entry)
DT
XX Amino acid sequence of a bombesin analogue peptide #1.
DE
XX

```

KW Cyanine dye; bioconjugate; cyostatic; antiarteriosclerotic;
 KW anticoagulant; photodynamic therapy; micrometastasis; bombesin.
 XX Synthetic.
 OS
 XX
 FH Key Location/Qualifiers
 FT Modified-site 11
 PT /note= "C-terminal amide"
 XX
 PN WO2003032902-A2.
 XX
 PD 24-APR-2003.
 XX
 PF 07-OCT-2002; 2002WO-US032022.
 XX
 PR 17-OCT-2001; 2001US-00981271.
 XX
 PA (MLCW) MALLINCKRODT INC.
 XX
 PI Achillefu SI, Rajagopalan R, Bugaj JE, Dorshow RB;
 XX
 DR WPI; 2003-457249/43.
 XX
 PT New cyanine dye bioconjugates useful for diagnosis and therapy, e.g. of
 PT tumors, micrometastases or atherosclerosis.
 XX
 PS Example 3; Page 19; 51pp; English.
 XX
 CC The invention relates to new cyanine dye bioconjugates of specified
 CC formula. The cyanine dye bioconjugates are useful for performing
 CC diagnostic or therapeutic procedures, especially optical tomography,
 CC fluorescence endoscopy, procedures involving imaging and therapy using
 CC absorption, light scattering, photoacoustic and sonofluorescence
 CC techniques, diagnosis and treatment of atherosclerotic plaques and blood
 CC clots, administering localized therapy, photodynamic therapy and laser
 CC assisted guided surgery for detection and treatment of micrometastases.
 CC The present sequence represents a bombesin analogue peptide used in the
 CC preparation of the bioconjugates of the invention
 CC
 CC Sequence 11 AA;
 SQ
 Query Match 100.0%; Score 25; DB 6; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 XQXXVXHL 8
 :|::|::|
 Db 3 GQNAVGH 10
 RESULT 178
 ABR44099
 ID ABR44099 standard; peptide; 11 AA.
 XX
 AC ABR44099;
 XX
 DT 04-AUG-2003 (first entry)
 XX
 DE Amino acid sequence of a bombesin analogue peptide #2.
 XX
 KW Cyanine dye; bioconjugate; cyostatic; antiarteriosclerotic;
 KW anticoagulant; photodynamic therapy; micrometastasis; bombesin.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 11
 PT /note= "C-terminal amide"
 XX
 PN WO2003032902-A2.
 XX
 PD 24-APR-2003.
 XX

PF 07-OCT-2002; 2002WO-US032022.
 XX
 PR 17-OCT-2001; 2001US-00981271.
 XX
 PA (MLCW) MALLINCKRODT INC.
 XX
 PI Achillefu SI, Rajagopalan R, Bugaj JE, Dorshow RB;
 XX
 DR WPI; 2003-457249/43.
 XX
 PT New cyanine dye bioconjugates useful for diagnosis and therapy, e.g. of
 PT tumors, micrometastases or atherosclerosis.
 XX
 PS Example 3; Page 19; 51pp; English.
 XX
 CC The invention relates to new cyanine dye bioconjugates of specified
 CC formula. The cyanine dye bioconjugates are useful for performing
 CC diagnostic or therapeutic procedures, especially optical tomography,
 CC fluorescence endoscopy, procedures involving imaging and therapy using
 CC absorption, light scattering, photoacoustic and sonofluorescence
 CC techniques, diagnosis and treatment of atherosclerotic plaques and blood
 CC clots, administering localized therapy, photodynamic therapy and laser
 CC assisted guided surgery for detection and treatment of micrometastases.
 CC The present sequence represents a bombesin analogue peptide used in the
 CC preparation of the bioconjugates of the invention
 CC
 CC Sequence 11 AA;
 SQ
 Query Match 100.0%; Score 25; DB 6; Length 11;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 XQXXVXHL 8
 :|::|::|
 Db 3 GQNAVGH 10
 RESULT 179
 ABR82872
 ID ABR82872 standard; peptide; 11 AA.
 XX
 AC ABR82872;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Amino acid sequence of a bombesin peptide analogue 2.
 XX
 KW Carboxyanine dye; bioconjugate; photosensitive; antiarteriosclerotic;
 KW cyostatic; tumour detection; bombesin.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 11
 PT /note= "C-terminal amide"
 XX
 PN WO2003065888-A1.
 XX
 PD 14-AUG-2003.
 XX
 PP 31-JAN-2003; 2003WO-US002901.
 XX
 PR 07-FEB-2002; 2002US-00071779.
 XX
 PA (MLCW) MALLINCKRODT INC.
 PA (BUGAJ) BUGAJ J E.
 XX
 PI Achillefu SI, Rajagopalan R, Dorshow RB;
 XX
 DR WPI; 2003-767181/72.
 XX
 PT New carboxyanine dye bioconjugate for use in diagnosis and therapy, e.g.
 PT in detecting, imaging, and treating of tumors, tomographic imaging or

PT organs, monitoring of organ functions, or performing coronary
PT angiography.
PS Example 3; Page 19; 0pp; English.
XX
CC The invention provides new carbocyanine dye bioconjugate of specified
CC formula. The inventive carbocyanine dye bioconjugate has optimal tumour-
CC targeting ability to provide a highly efficient photosensitive agent. The
CC bioconjugates are useful in diagnosis and therapy, in e.g. detecting,
CC imaging, and treating of tumours, tomographic imaging or organs,
CC monitoring of organ functions, performing coronary angiography,
CC fluorescence endoscopy, laser guided surgery, or performing photoacoustic
CC and sono-fluorescent methods. Sequences ABR82869-876 represent peptides
CC synthesised for use in peptide-dye conjugates of the invention
SQ Sequence 11 AA;
Query Match 100.0%; Score 25; DB 7; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHL 8
: : : : :
DB 3 QQWAVGHL 10
RESULT 180
ABR82871
ID ABR82871 standard; peptide; 11 AA.
AC ABR82871;
XX 18-DEC-2003 (first entry)
DT
XX Amino acid sequence of a bombesin peptide analogue 1.
DE
XX Carbocyanine dye; bioconjugate; photosensitive; antiarteriosclerotic;
KW cytosarctic; tumour detection; bombesin.
XX
XX Synthetic.
OS
FH Key Location/Qualifiers
FT Modified-site 11 /note= "C-terminal amide"
XX
XX WO2003065888-A1.
PN 14-AUG-2003.
PD
XX 31-JAN-2003; 2003WO-US002901.
XX
XX 07-FEB-2002; 2002US-00071779.
PR
XX (MLCW) MALLINCKRODT INC.
PA (BUGAJ) BUGAJ J E.
XX
PI Achillefu SI, Rajagopalan R, Dorschow RB;
XX WPI; 2003-767181/72.
DR
XX New carbocyanine dye bioconjugate for use in diagnosis and therapy, e.g.
PT in detecting, imaging, and treating of tumors, tomographic imaging or
PT organs, monitoring of organ functions, or performing coronary
PT angiography.
PS Example 3; Page 19; 0pp; English.
XX
CC The invention provides new carbocyanine dye bioconjugate of specified
CC formula. The inventive carbocyanine dye bioconjugate has optimal tumour-
CC targeting ability to provide a highly efficient photosensitive agent. The
CC bioconjugates are useful in diagnosis and therapy, in e.g. detecting,
CC imaging, and treating of tumours, tomographic imaging or organs,
CC monitoring of organ functions, performing coronary angiography,

CC fluorescence endoscopy, laser guided surgery, or performing photoacoustic
CC and sono-fluorescent methods. Sequences ABR82869-876 represent peptides
CC synthesised for use in peptide-dye conjugates of the invention
SQ Sequence 11 AA;
Query Match 100.0%; Score 25; DB 7; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHL 8
: : : : :
DB 3 QQWAVGHL 10
RESULT 181
ADD70000
ID ADD70000 standard; peptide; 11 AA.
AC ADD70000;
XX 15-JAN-2004 (first entry)
DT
XX Therapeutic peptide Bombesin.
DE
XX gastrointestinal disorder; diabetes; malignant proliferation;
KW benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW growth hormone releasing factor; GRF; litorin; neuropeptide C; cancer;
KW small cell lung carcinoma; motility disorder;
KW exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
XX Amphibia.
OS
FH Key Location/Qualifiers
FT Modified-site 11 /note= "Amidated"
XX
XX US2003050436-A1.
PD 13-MAR-2003.
XX
XX 23-OCT-2001; 2001US-00004530.
XX
XX 24-SEP-1987; 87US-00100571.
PR 25-MAR-1988; 88US-00173311.
PR 08-JUN-1988; 88US-00204171.
PR 16-JUN-1988; 88US-00207759.
PR 23-SEP-1988; 88US-00248771.
PR 14-OCT-1988; 88US-00257998.
PR 09-DEC-1988; 88US-00282328.
PR 02-MAR-1989; 89US-00317941.
PR 07-JUL-1989; 89US-00376555.
PR 21-AUG-1989; 89US-00397169.
PR 30-MAR-1990; 90US-00502438.
PR 18-OCT-1991; 91US-00779039.
PR 10-NOV-1994; 94US-00337127.
PR 02-MAR-1999; 99US-00260846.
XX
XX (BIOM-) BIOMEASURE INC.
XX
PI Coy DH, Moreau J, Kim SH;
XX WPI; 2003-810756/76.
DR
XX New therapeutic peptide used for treating e.g. gastrointestinal
PT disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT diabetes.
PS Disclosure; Page 1; 23pp; English.
XX
XX The invention relates to a new therapeutic peptide comprising 7-10 amino
CC acid residues. The peptide is an analogue of naturally occurring peptides

terminating at the carboxy-terminus with a Met residue (e.g. bombesin, gastrin-releasing peptide (GRP), vasoactive intestinal peptide, VIP), growth hormone releasing factor (GRF), litorin and neuromedin C) of formula detailed in the specification. The peptides are used for treating cancer e.g. small cell lung carcinoma, motility disorders of the gastrointestinal tract and symptomatic relief and/or treatment of exocrine pancreatic carcinoma and for restoration of appetite in cachexia patients, as autocrine or paracrine mitotic agent, and for treating benign and malignant proliferation of tissue, gastrointestinal disorders, atherosclerosis and diabetes and diabetic retinopathy. The present sequence is one of the naturally occurring peptides upon which the peptides of the invention are based.

CC
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 25; DB 7; Length 11;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXXVXHL 8
:|::|:|
Db 3 PQPLVWHL 10

RESULT 182
AA92995
ID AA92995 standard; peptide; 12 AA.
XX
AC AA92995;
XX
DT 08-NOV-2000 (first entry)
XX
DE Transforming growth factor inhibitory peptide P41.
XX
KM Hepatotropic; antagonist; transforming growth factor betaf; TGF-b1;
KM competitive inhibition; collagen synthesis stimulation inhibitor; liver;
KM extracellular matrix degradation inhibitor; mimotope; cirrhosis.
XX
OS Rattus sp.
XX
PN WO200031135-A1.
XX
PD 02-JUN-2000.
XX
PF 23-NOV-1999; 99WO-ES000375.
XX
PR 24-NOV-1998; 98ES-00002465.
XX
PA (CIEN-) INST CIENTIFICO & TECNOLÓGICO NAVARRA.
XX
PI Ezquerro Saenz JI, Lasarte Sagastibelza JI, Prieto Valtuena J;
PI Borras Cuesta F;
XX
DR WPI; 2000-411935/35.
XX
PT Peptides that antagonize binding of transforming growth factor betaf,
PT useful for treatment of liver disease, especially cirrhosis, are partial
PT sequences of the factor or its receptors.
XX
PS Disclosure; Page 27; 86pp; Spanish.
XX
SQ The invention relates to synthetic peptides that antagonise the binding
CC of transforming growth (TGF) factor betaf (TGF-b1) to its receptor in
CC vivo which have partial amino acid sequences identical, or similar, with
CC those of TGF-b1 and/or its receptors. Peptides AA92945-Y93133 represent
CC examples of the peptides of the invention. The peptides act by
CC competitive inhibition of the binding of TGF-b1 to its receptors, e.g.
CC they are inhibitors of stimulation of collagen synthesis in liver cells
CC and inhibitors of synthesis of proteolytic enzymes able to degrade the
CC extracellular matrix. The peptides, their mimetopes and/or DNA (or
CC expression systems) encoding the peptides are used for treatment of liver
CC disease, specifically cirrhosis
XX

SQ Sequence 12 AA;

Query Match 100.0%; Score 25; DB 3; Length 12;
Best Local Similarity 50.0%; Pred. No. 1.8e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXXVXHL 8
:|::|:|
Db 2 PQPLVWHL 9

RESULT 183
AA92996
ID AA92996 standard; peptide; 12 AA.
XX
AC AA92996;
XX
DT 08-NOV-2000 (first entry)
XX
DE Transforming growth factor inhibitory peptide P42.
XX
KM Hepatotropic; antagonist; transforming growth factor betaf; TGF-b1;
KM competitive inhibition; collagen synthesis stimulation inhibitor; liver;
KM extracellular matrix degradation inhibitor; mimotope; cirrhosis.
XX
OS Rattus sp.
XX
PN WO200031135-A1.
XX
PD 02-JUN-2000.
XX
PF 23-NOV-1999; 99WO-ES000375.
XX
PR 24-NOV-1998; 98ES-00002465.
XX
PA (CIEN-) INST CIENTIFICO & TECNOLÓGICO NAVARRA.
XX
PI Ezquerro Saenz JI, Lasarte Sagastibelza JI, Prieto Valtuena J;
PI Borras Cuesta F;
XX
DR WPI; 2000-411935/35.
XX
PD Peptides that antagonize binding of transforming growth factor betaf,
PT useful for treatment of liver disease, especially cirrhosis, are partial
PT sequences of the factor or its receptors.
XX
PS Disclosure; Page 27; 86pp; Spanish.
XX
SQ The invention relates to synthetic peptides that antagonise the binding
CC of transforming growth (TGF) factor betaf (TGF-b1) to its receptor in
CC vivo which have partial amino acid sequences identical, or similar, with
CC those of TGF-b1 and/or its receptors. Peptides AA92945-Y93133 represent
CC examples of the peptides of the invention. The peptides act by
CC competitive inhibition of the binding of TGF-b1 to its receptors, e.g.
CC they are inhibitors of stimulation of collagen synthesis in liver cells
CC and inhibitors of synthesis of proteolytic enzymes able to degrade the
CC extracellular matrix. The peptides, their mimetopes and/or DNA (or
CC expression systems) encoding the peptides are used for treatment of liver
CC disease, specifically cirrhosis
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 25; DB 3; Length 12;
Best Local Similarity 50.0%; Pred. No. 1.8e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXXVXHL 8
:|::|:|
Db 1 PQPLVWHL 8

RESULT 184
AA92107

ID AAY82107 standard; peptide; 12 AA.
 AC AAY82107;
 DT 02-JUN-2000 (first entry)
 DE Bombesin homologue peptide #2.
 XX
 KW Bombesin; technetium-99m label; radioimaging; radiodiagnostic;
 KM mercaptoacetyltyrosine; MAG3; radiolabelling; nuclear medicine;
 peptide synthesis.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 4 /note= "D-form residue"
 FT Modified-site 12 /note= "amidated"
 FT
 PN CA2225326-A1.
 XX
 PD 19-JUN-1999.
 XX
 PF 19-DEC-1997; 97CA-02225326.
 XX
 PR 19-DEC-1997; 97CA-02225326.
 XX
 PA (OKAR/) OKARVI S M.
 PA (WISH/) WISHART D.
 PA (VDOM/) VAN DOMESLAAR G.
 PA (SURE/) SURESH M R.
 XX
 PI Okarvi SM, Wishart D, Van Domeselaar G, Suresh MR;
 XX
 DR WPI; 2000-238086/21.
 XX
 PT Preparation of 99mTc-labelled peptides, used in radioimaging, comprises
 PT allowing a mercaptoacetyltyrosine technetium chelate to be attached
 PT directly onto a growing peptide chain.
 XX
 PS Disclosure; Page 5; 27pp; English.
 XX
 CC The present invention describes the preparation of 99mTc-labelled
 CC peptides comprising a simple solid phase synthetic approach which allows
 CC a mercaptoacetyltyrosine (MAG3) technetium chelate to be attached
 CC directly onto a growing peptide chain using conventional solid phase
 CC peptide chemistry. The method is used for preparing 99mTc-labelled
 CC peptides for use in radioimaging and radiodiagnosis. The process
 CC requires less purification steps than prior art, eliminates the need for
 CC resolution-phase conjugation and avoids problems associated with non-
 CC specific chelator conjugation. The peptide-conjugates prepared can be
 CC efficiently labeled with 99mTc (92%), are highly resistant to cysteine
 CC challenge, are very stable to plasma and can bind with desired cellular
 CC targets. The present sequence represents a bombesin homologue peptide
 CC used in the exemplification of the present invention
 CC
 XX
 SQ Sequence 12 AA;
 Query Match 100.0%; Score 25; DB 3; Length 12;
 Best Local Similarity 50.0%; Pred. No. 1.8e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 Db 4 FQMAVGH 11
 XX
 RESULT 185
 AAB91906
 ID AAB91906 standard; peptide; 13 AA.
 XX
 AC AAB91906;

XX
 DT 22-JUN-2001 (first entry)
 XX
 DE Bombesin peptide SEQ ID NO:1082.
 XX
 KW Protection; endogenous therapeutic peptide; peptidase; conjugation;
 KM blood component; modification; succinimidy1; maleimido group; amino;
 KM hydroxyl; thiol; hormone; growth factor; neurotransmitter.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200069900-A2.
 XX
 PD 23-NOV-2000.
 XX
 PF 17-MAY-2000; 2000WO-US013576.
 XX
 PR 17-MAY-1999; 99US-0134406P.
 PR 10-SEP-1999; 99US-0153406P.
 PR 15-OCT-1999; 99US-0159783P.
 XX
 PA (CONJ-) CONJUCHEM INC.
 XX
 PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thiabaudau K;
 XX
 DR WPI; 2001-112059/12.
 XX
 PT Modifying and attaching therapeutic peptides to albumin prevents
 PT peptidase degradation, useful for increasing length of in vivo activity.
 XX
 PS Disclosure; Page 549; 733pp; English.
 XX
 CC The present invention describes a modified therapeutic peptide (I)
 CC comprising a therapeutically active amino acid region (III) and a
 CC reactive group (II) (e.g. succinimidy1 and maleimido groups) attached to
 CC a less therapeutically active amino acid region (IV), which covalently
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a
 CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth
 CC factors and neurotransmitters, to protect them from peptidase activity in
 CC vivo for the treatment of various disorders. Endogenous therapeutic
 CC peptides are not suitable as drug candidates as they require frequent
 CC administration due to rapid degradation by peptidases in the body.
 CC Modifying and attaching therapeutic peptides to albumin prevents or
 CC reduces the action of peptidases to increase length of activity (half
 CC life) and specifically as bonding to large molecules decreases
 CC intracellular uptake and interference with physiological processes.
 CC AAB90829 to AAB92441 represent peptides which can be used in the
 CC exemplification of the present invention
 CC
 XX
 SQ Sequence 13 AA;
 Query Match 100.0%; Score 25; DB 4; Length 13;
 Best Local Similarity 50.0%; Pred. No. 2e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 Db 5 NQMAVGH 12
 XX
 RESULT 186
 AAB91913
 ID AAB91913 standard; peptide; 13 AA.
 XX
 AC AAB91913;
 XX
 DT 22-JUN-2001 (first entry)
 XX
 DE Bombesin peptide SEQ ID NO:1089.
 XX
 KW Protection; endogenous therapeutic peptide; peptidase; conjugation;

KM blood component; modification; succinimidy1; maleimido group; amino;
 KM hydroxyl; thiol; hormone; growth factor; neurotransmitter.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO20069900-A2.
 XX
 PD 23-NOV-2000.
 XX
 PF 17-MAY-2000; 2000WO-US013576.
 XX
 PR 17-MAY-1999; 99US-0134406P.
 PR 10-SEP-1999; 99US-0153406P.
 PR 15-OCT-1999; 99US-0159783P.
 XX
 PA (CONJ-) CONUTCHEM INC.
 XX
 PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;
 XX
 DR WPI; 2001-112059/12.
 XX
 PT Modifying and attaching therapeutic peptides to albumin prevents
 PT peptidase degradation, useful for increasing length of in vivo activity.
 XX
 PS Disclosure; Page 551; 733pp; English.
 XX
 CC The present invention describes a modified therapeutic peptide (I)
 CC comprising a therapeutically active amino acid region (III) and a
 CC reactive group (II) (e.g. succinimidy1 and maleimido groups) attached to
 CC a less therapeutically active amino acid region (IV), which covalently
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a
 CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth
 CC factors and neurotransmitters, to protect them from peptidase activity in
 CC vivo for the treatment of various disorders. Endogenous therapeutic
 CC peptides are not suitable as drug candidates as they require frequent
 CC administration due to rapid degradation by peptidases in the body.
 CC Modifying and attaching therapeutic peptides to albumin prevents or
 CC reduces the action of peptidases to increase length of activity (half
 CC life) and specificity as bonding to large molecules decreases.
 CC Intracellular uptake and interference with physiological processes.
 CC AAB90829 to AAB92441 represent peptides which can be used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 13 AA;
 XX
 QY Query Match 100.0%; Score 25; DB 4; Length 13;
 Best Local Similarity 50.0%; Pred. No. 2e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Db 1 XQXXVXHL 8
 5 NQMAVGH 12
 XX
 RESULT 187
 AABG72845
 ID AABG72845 standard; peptide; 13 AA.
 XX
 AC AABG72845;
 XX
 DT 27-FEB-2003 (first entry)
 XX
 DE Peptide used in electron capture dissociation of b13 2+ ions.
 XX
 KM electron capture dissociation; mass spectrometry; electron density;
 KM polypeptide ion; carbohydrate ion; organic polymer ion; ECD;
 KM shorter ion-electron reaction.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers

FT Modified-site 1
 FT /note= "p not defined"
 XX
 PN WO200278048-A1.
 XX
 PD 03-OCT-2002.
 XX
 PF 22-MAR-2002; 2002WO-DK000195.
 XX
 PR 22-MAR-2001; 2001DK-00000478.
 PR 22-MAR-2001; 2001US-0277621P.
 PR 16-JAN-2002; 2002DK-0000069.
 PR 16-JAN-2002; 2002US-0348368P.
 XX
 PA (UYSY-) UNIV SYDANSK.
 XX
 PI Zubarev R;
 XX
 DR WPI; 2003-103225/09.
 XX
 PT Production of electron capture of positive ions, for use in mass
 PT spectrometry, involves providing electron beam having electron density
 PT and low energy to provide electron capture by trapped ions.
 XX
 PS Example 1; Fig 7; 33pp; English.
 XX
 CC The invention relates to electron capture of positive ions for use in
 CC mass spectrometry that is produced by providing an electron beam having
 CC electron density of a magnitude so that the potential depression created
 CC by the electrons is larger or equal to the kinetic energy of the motion
 CC radial to the beam of the ions thus trapping the portion of ions. The
 CC invention can be used for producing electron capture of positive ions,
 CC e.g., polypeptide, carbohydrate and organic polymer ions, for use in mass
 CC spectrometry. The inventive method provides the ion-electron reaction to
 CC be shortened and improves efficiency of collection of fragments to make
 CC electron capture dissociation more useful. It provides the electron
 CC capture dissociation technique to be used in other types of mass
 CC spectrometers. The ions confined by the electron beam effectively capture
 CC electrons, thus leading to much shorter analysis time. The present
 CC sequence represents the amino acid sequence of a peptide used in the
 CC electron capture dissociation of b13 2+ ions
 XX
 SQ Sequence 13 AA;
 XX
 QY Query Match 100.0%; Score 25; DB 6; Length 13;
 Best Local Similarity 50.0%; Pred. No. 2e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Db 1 XQXXVXHL 8
 6 NQMAVGH 13
 XX
 RESULT 188
 AAP80311
 ID AAP80311 standard; peptide; 14 AA.
 XX
 AC AAP80311;
 XX
 DT 25-MAR-2003 (revised)
 DT 14-SEP-1990 (first entry)
 XX
 DE Sequence of bombesin which binds with polypeptide receptor for bombesin
 DE type polypeptides.
 XX
 KM Spantide; neuropeptide; polypeptide receptor; bombesin; cancer diagnosis;
 KM cancer therapy; Swiss 3T3 cells; bombesin type polypeptides.
 XX
 OS Swiss 3T3 cells.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 1
 FT /label= OTHER

FT /note= "pglu"
 FT Misc-difference 14
 FT /label= OTHER
 FT /note= "Met-NR2"
 XX WO8807551-A.
 XX
 XX 06-OCT-1988.
 PD
 XX 31-MAR-1988; 88WO-GB000255.
 XX
 XX 31-MAR-1987; 87GB-00007607.
 PR 25-NOV-1987; 87GB-00027638.
 XX
 XX (IMCR) IMPERIAL CANCER RES TECHNOLOGY.
 PA
 P1 Rosengurt E, Zachary I, Woll P;
 XX WPI, 1988-292842/41.
 DR
 XX New polypeptide receptor for bombesin type polypeptide(s) - is isolated
 PT from surface of Swiss 3T3 cells, and antibodies and antagonists are
 PT useful for treating uncontrolled cell proliferation.
 PS Disclosure; Table 2; 42pp; English.
 XX
 XX The patent claims a polypeptide isolated from the surface of Swiss 3T3
 CC cells which binds selectively with polypeptides of the bombesin type and
 CC binds with antagonist A and antagonist D. Antagonist A is a commercially
 CC available structural variant of substance P, known as [D-Arg1, D-Pro2, D-
 CC Trp7,9, Leu11] substance P. It is also known as [D-Pro2] spantide.
 CC Antagonist B is also commercially available structural variant of
 CC substance P, known as [D-Phe5] spantide. Substance P is an 11-mer
 CC neuropeptide, of interest in studies in pain transmission. Ten substance
 CC P antagonists (see AAP80313-80322) were tested for their ability to
 CC inhibit mitogenesis stimulated by GRP (the mammalian homologue of
 CC bombesin in Swiss 3T3 cells). Antagonist D was clearly the most potent
 CC GRP antagonist. Peptides B, C, D, E, F, G, H, J and K were less potent
 CC than either A or D. Spantide (B) had no antagonist activity even at 100
 CC uM. Polypeptide antagonists A and D and novel variants are useful for
 CC diagnosis and therapy, esp. of cancers where uncontrolled cell growth is
 CC associated with disorders of proteins of the bombesin family. (Updated on
 CC 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA
 CC field.)
 CC
 XX Sequence 14 AA:
 SQ
 QY Query Match 100.0%; Score 25; DB 1; Length 14;
 DB Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 OY 1 XQXXVXHL 8
 DB 6 NQMAVGHL 13
 XX
 XX RESULT 189
 XX AAR29587
 XX ID AAR29587 standard; peptide; 14 AA.
 XX AC AAR29587;
 XX DT 25-MAR-2003 (revised)
 XX DT 13-APR-1993 (first entry)
 XX DE [Leu13-ps1[CH2NH]-Leu14]-bombesin.
 XX KW Intracellular signal; inhibition; gastrointestinal tract; licorin;
 XX KM Gastrin Releasing Peptide; GRP.
 XX OS Synthetic.
 XX FH Key Location/Qualifiers
 XX

FT Modified-site 1
 FT /label= OTHER
 FT /note= "pyroglutamic acid"
 FT Modified-site 13. 14
 FT /note= "Non-peptide bond between Leu13 and Leu14
 FT FT consisting of a methyl amide group"
 FT Modified-site 14
 FT /note= "amidated"
 XX
 XX WO9220707-A1.
 XX
 XX 26-NOV-1992.
 PD
 XX 21-APR-1992; 92WO-US003287.
 PF 23-MAY-1991; 91US-00704863.
 XX
 XX (RICH) MERRELL DOW PHARM INC.
 XX
 XX Edwards JV, Fanger BO;
 XX WPI, 1992-415707/50.
 DR
 XX New bombesin peptide agonists and antagonists - stimulate or inhibit
 PT digestion, increase susceptibility of tumours to chemotherapeutic agents,
 PT used to.
 XX
 XX Example; Page 40; 64pp; English.
 PS
 XX This peptide is a specific example of a highly generic formula for
 CC bombesin analogues. The peptide was tested in a competitive binding assay
 CC and a Phosphatidyl Inositol (PI)-turnover assay in mouse pancreas. The
 CC peptide demonstrated no agonist activity but showed 30% inhibition of PI-
 CC turnover (c.f. stimulation produced by 100nM GRP). Peptide agonists and
 CC antagonists covered by the generic formula are potentially useful for
 CC growth therapy and the treatment of digestive disorders, e.g. for
 CC stimulating digestion, stimulating growth of tissue in the lung, pancreas
 CC and intestine, stimulating NK cell activity against tumour cells and
 CC stimulating growth of tumours to increase susceptibility to
 CC chemotherapeutic agents. (Updated on 25-MAR-2003 to correct PN field.)
 CC
 XX Sequence 14 AA:
 SQ
 QY Query Match 100.0%; Score 25; DB 2; Length 14;
 DB Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 OY 1 XQXXVXHL 8
 DB 6 NQMAVGHL 13
 XX
 XX RESULT 190
 XX AAR47617
 XX ID AAR47617 standard; peptide; 14 AA.
 XX AC AAR47617;
 XX DT 25-MAR-2003 (revised)
 XX DT 26-JUL-1994 (first entry)
 XX DE Bombesin-like peptide analogue.
 XX KW Acrosome reaction; fertilisation.
 XX OS Homo sapiens.
 XX FH Key Location/Qualifiers
 XX FT Modified-site 14
 XX FT /note= "amidated"
 XX WO9402018-A1.
 XX

PD 03-FEB-1994.
 XX
 PF 27-JUL-1993; 93WO-US007044.
 XX
 PR 27-JUL-1992; 92US-00919731.
 PR 23-MAR-1993; 93US-00039778.
 XX
 PA (MED-) MEDICAL RES FOUND OREGON.
 PI Spindel BR, Vijayaraghavan S, Nagalia SR, Li K;
 XX WPI; 1994-048427/06.
 DR
 XX New bombesin-like acrosome-related peptides - used to promote the
 PT acrosome reaction to promote fertilisation or to develop antagonists to
 PR inhibit fertilisation.
 XX
 PS Disclosure; Page 53; 68pp; English.
 XX
 CC The peptide is a bombesin-like peptide which is capable of promoting the
 CC acrosome reaction to promote fertilisation. Bombesin antagonists can be
 CC used to inhibit fertilisation. See also AAR47609-20. (Updated on 25-MAR-
 CC 2003 to correct PN field.)
 XX
 SQ Sequence 14 AA;
 Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 Db 6 NQMAVGH 13
 RESULT 191
 AAW64900
 ID AAW64900 standard; peptide; 14 AA.
 AC AAW64900;
 XX
 DT 06-JUL-1999 (first entry)
 XX
 DE Bombesin peptide having chlorambucil on the N-terminal.
 XX
 KW Bombesin; antagonist; chlorambucil; peptic ulcer; pancreatitis;
 KW eating disorder; diabetes; acromegaly; enterocutaneous fistula;
 KW psoriasis; growth retardation; gastrointestinal motility disorder;
 KW antitumour.
 XX
 OS Bombina bombina.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1 /note= "pyroglutamic acid residue in which the amino
 FT group is acylated by a chlorambucil residue"
 FT Modified-site 14 /note= "Met-NH2"
 FT
 XX
 PN WO9500542-A1.
 XX
 PD 05-JAN-1995.
 XX
 PF 15-JUN-1994; 94WO-US006757.
 XX
 PR 18-JUN-1993; 93US-00078062.
 PR 17-DEC-1993; 93US-00168390.
 XX
 PA (PEPT-) PEPTIDE TECHNOLOGIES CORP.
 PI Knight M, Takahashi K, Chandrasekhar B;
 XX WPI; 1995-052004/07.
 XX

XX
 PT New bombesin, gastrin releasing peptide or Neuromedin B or C dérivs. -
 PT antagonists for treating conditions such as gastrointestinal disorders,
 XX psoriasis and cancers.
 XX
 PS Claim 1; Page 30; 45pp; English.
 XX
 CC The patent discloses (1) the peptide sequence of bombesin (BBN), gastrin
 CC releasing peptide (GRP), Neuromedin B or Neuromedin C, the peptide
 CC sequence having a chlorambucil group attached to the amino terminal; (2)
 CC a BBN receptor antagonist of formula R4-His-Trp-Ala-R1-R2-His-R3-CO-
 CC CH2CH3; and (3) a BBN receptor antagonist of formula R4-Asn-R5-Trp-Ala-
 CC Val-R2-His-Leu-CO-CH2CH3. In these formulae, R1 = Val or Thr; R2 = Gly or
 CC D-Ala; R3 = Leu or Phe; R4 = N-acetyl, bromoacetyl, chloroacetyl, (bis(2-
 CC chloroethyl)- amino)-L-phenylalanine or a chlorambucil group; and R5 =
 CC Glu or His. The compounds act as potent BBN/GRP-like peptide antagonists.
 CC They can be used to inhibit the growth of cells that are sensitive to the
 CC growth-promoting effects of BBN, GRP or a related peptide such as
 CC pancreatic cells, gastric cells, neurons, hypothalamic cells and
 CC cancerous cells or tumours. They can also be used to inhibit the binding
 CC of BBN, GRP or a related peptide to cells capable of such binding. They
 CC can be used for treating e.g. peptic ulcer, pancreatitis, eating
 CC disorders, diabetes, acromegaly, enterocutaneous fistula, psoriasis,
 CC growth retardation, gastrointestinal motility disorders or tumours. The
 CC terminal structures of the compounds protect them from in vivo
 CC proteolysis and provide highly potent antagonist effects that persist for
 CC extended periods of time upon administration
 XX
 SQ Sequence 14 AA;
 Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 Db 6 NQMAVGH 13
 RESULT 192
 AAW11504
 ID AAW11504 standard; peptide; 14 AA.
 AC AAW11504;
 XX
 DT 24-SEP-1997 (first entry)
 XX
 DE Bombesin peptide for fusion to humanised anti-Fc gamma RI antibody.
 XX
 KW Humanised antibody; anti-Fc receptor; H22; bifunctional; bispecific;
 KW fusion protein; chimera; cancer; tumour; cytotoxic; bombesin.
 XX
 OS Synthetic.
 XX
 PN WO9640789-A1.
 PD 19-DEC-1996.
 PD
 XX
 PR 07-JUN-1996; 96WO-US009988.
 XX
 PR 07-JUN-1995; 95US-00484172.
 XX
 PA (MEDA-) MEDAREX INC.
 PI Deo YM, Goldstein J, Graziano R, Somasundaram C;
 XX WPI; 1997-052242/05.
 DR
 XX
 PT Recombinant, multi-specific anti-Fc receptor antibody molecules - also
 PT comprise an anti-target portion, used for the treatment of cancer,
 PT autoimmune disease and pathogenic infection.
 XX
 PS Example 4; Page 29; 115pp; English.
 XX

XX DNA encoding the heavy chain of humanised anti-Fc gamma RI monoclonal
 CC antibody H22 was fused to a synthetic DNA sequence encoding amino acids 2
 CC -14 of bombesin with an additional glycine residue at the C-terminal of
 CC the peptide (i.e. the present sequence). The resulting fusion protein was
 CC shown to mediate tumour cell killing

XX Sequence 14 AA;

Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 :|::|::|
 Db 5 NQMAVGH 12

RESULT 193

AAW04621
 ID AAW04621 standard; peptide; 14 AA.

XX AAW04621;

DT 13-AUG-1997 (first entry)

DE Bombesin peptide for mass spectrometry analysis.

KM Mass spectrometry; polymer analysis; biopolymer analysis.

XX Synthetic.

XX WO9636986-A1.

XX 21-NOV-1996.

XX 17-MAY-1996; 96WO-US007146.

XX 19-MAY-1995; 95US-00446055.

XX 19-MAY-1995; 95US-00447175.

PA (PERS-) PERSEPTIVE BIOSYSTEMS INC.

PI Patterson DH, Tarr GE;

DR WPI; 1997-012308/01.

XX Sequencing polymers, e.g. DNA, peptide nucleic acids, proteins, etc.

PT - by obtaining mass to charge ratios of polymer fragments, pref. using
 PT mass spectrometer, and performing statistical analysis.

XX Example 2; Page 32; 86pp; English.

XX A method of obtaining sequence information about a polymer (e.g. DNA,
 CC RNA, peptide nucleic acids, proteins, peptides and carbohydrates)

CC comprising monomers of known mass has been claimed. The present sequence
 CC represents a bombesin peptide, and was used as an example as a digestion
 CC before analysis by mass spectrometry, using this novel on-plate strategy.

CC Total sequence information from a nine well digestion can be represented
 CC in a single digestion or it is often derived from two or more wells. The
 CC methods, apparatus and kit (claimed) can be used for the analysis of

CC polymers, particularly biopolymers, e.g. DNA, RNA, peptide nucleic acids,
 CC proteins, peptides and carbohydrates. It provides a rapid, automated and
 CC cost effective sequencing of polymers, with a statistical certainty

XX

XX

SO Sequence 14 AA;

Query Match 100.0%; Score 25; DB 2; Length 14;

Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 :|::|::|

Db 6 NQMAVGH 13

RESULT 194

AAW50621
 ID AAW50621 standard; peptide; 14 AA.

XX AAW50621;

DT 14-SEP-1998 (first entry)

DE Peptide analogue for treating cancer.

XX Cancer; gastrin releasing peptide; neuromedin B; neuromedin C; bombesin;
 KW litorin; peptide analogue; colon; prostate; breast cancer.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

XX Synthetic.

CC The invention relates to a method of treating cancer which involves
 CC administering a cancer cell inhibiting amount of an analogue of a
 CC naturally occurring biologically active peptide or a fragment thereof,
 CC the peptide being one of mammalian gastrin releasing peptide, neuromedin
 CC B, neuromedin C, amphibian bombesin or litorin. The peptides are useful
 CC in the treatment of mammalian, especially human cancers, particularly
 CC colon, prostate, lung, breast and pancreatic cancer. The analogues can
 CC also be used to treat non-malignant proliferative diseases in humans. The
 CC present sequence represents a specifically claimed peptide analogue

XX

XX

SO Sequence 14 AA;

Query Match 100.0%; Score 25; DB 2; Length 14;

Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHL 8
 :|::|::|
 Db 6 NQMAVGH 13

RESULT 195

AAW50965
 ID AAW50965 standard; peptide; 14 AA.

XX AAW50965;

DT 31-JUL-1998 (first entry)

XX Bombesin analogue [Tyr4].
 XX
 DE Vasoactive intestinal peptide; VIP; antagonist; somatostatin; bombesin;
 XX Substance P; cancer; inhibition; growth hormone releasing factor.
 KW
 XX Synthetic.
 OS
 XX Key
 FH Modified-site 1 Location/Qualifiers
 FT /note= "Pyroglutamic acid"
 FT Modified-site 14
 FT /note= "C-terminal amide"
 XX
 XX EP835662-A2.
 XX
 XX 15-APR-1998.
 XX
 XX 11-DEC-1996; 96EP-00309012.
 XX
 XX 08-OCT-1996; 96US-00727679.
 XX
 XX (NAIM-) NAT INST IMMUNOLOGY.
 XX
 XX Mukherjee R, Jaggi M;
 XX WPI; 1998-208959/19.
 XX
 XX Composition containing analogues of vasoactive intestinal peptide,
 PT somatostatin - bombesin and substance P, for treatment of tumours and for
 PT inhibiting over-expression of these peptide(s).
 PT
 XX Disclosure; Page 12; 49pp; English.
 XX
 XX The invention relates to a new composition which comprises: (i) the
 CC somatostatin analogue SOM2 AGCKNPFDMKPTSDC (3-14 disulphide bridge), and
 CC (ii) at least 4 of the peptides: antagonist of vasoactive intestinal
 CC peptide (VIP); VIP receptor-binding inhibitor (VIP2); VIP receptor
 CC antagonist (VIP3); somatostatin analogue (SOM1); bombesin antagonist
 CC (BOM1) and substance P antagonist (SP1). Also claimed are more general
 CC compositions containing peptide analogues of somatostatin, VIP, bombesin
 CC and substance P. The compositions are used in human or veterinary
 CC medicine: (a) to kill (or inhibit multiplication of) tumour or cancer
 CC cells, particularly for treatment of leukaemia, lymphoma, adenocarcinoma
 CC of stomach, pancreas or prostate, or cancer of lung, breast, kidney or
 CC particularly rectum and colon, and (b) to prevent, inhibit or modulate
 CC over-expression of, e.g. VIP. A wide range of cancer cells express
 CC receptors for VIP, somatostatin, bombesin and/or substance P. The present
 CC sequence represents a bombesin analogue
 CC
 XX Sequence 14 AA;
 SQ
 Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XXXXXVXHL 8
 Db 6 NQMAVGH 13
 RESULT 196
 AAW50959
 ID AAW50959 standard; peptide; 14 AA.
 XX
 XX AAW50959;
 AC
 XX 31-JUL-1998 (first entry)
 DT
 XX Bombesin analogue, [Leu13-R-Leu14]-bombesin.
 DE Vasoactive intestinal peptide; VIP; antagonist; somatostatin; bombesin;
 KW Substance P; cancer; inhibition; growth hormone releasing factor.
 XX

XX Synthetic.
 OS
 XX Key
 FH Modified-site 1 Location/Qualifiers
 FT /note= "Pyroglutamic acid"
 FT Misc-difference 13.14
 FT /note= "Reduced bond"
 FT Modified-site 14
 FT /note= "C-terminal amide"
 XX
 XX EP835662-A2.
 XX
 XX 15-APR-1998.
 XX
 XX 11-DEC-1996; 96EP-00309012.
 XX
 XX 08-OCT-1996; 96US-00727679.
 XX
 XX (NAIM-) NAT INST IMMUNOLOGY.
 XX
 XX Mukherjee R, Jaggi M;
 XX WPI; 1998-208959/19.
 XX
 XX Composition containing analogues of vasoactive intestinal peptide,
 PT somatostatin - bombesin and substance P, for treatment of tumours and for
 PT inhibiting over-expression of these peptide(s).
 PT
 XX Disclosure; Page 12; 49pp; English.
 XX
 XX The invention relates to a new composition which comprises: (i) the
 CC somatostatin analogue SOM2 AGCKNPFDMKPTSDC (3-14 disulphide bridge), and
 CC (ii) at least 4 of the peptides: antagonist of vasoactive intestinal
 CC peptide (VIP); VIP receptor-binding inhibitor (VIP2); VIP receptor
 CC antagonist (VIP3); somatostatin analogue (SOM1); bombesin antagonist
 CC (BOM1) and substance P antagonist (SP1). Also claimed are more general
 CC compositions containing peptide analogues of somatostatin, VIP, bombesin
 CC and substance P. The compositions are used in human or veterinary
 CC medicine: (a) to kill (or inhibit multiplication of) tumour or cancer
 CC cells, particularly for treatment of leukaemia, lymphoma, adenocarcinoma
 CC of stomach, pancreas or prostate, or cancer of lung, breast, kidney or
 CC particularly rectum and colon, and (b) to prevent, inhibit or modulate
 CC over-expression of, e.g. VIP. A wide range of cancer cells express
 CC receptors for VIP, somatostatin, bombesin and/or substance P. The present
 CC sequence represents a bombesin analogue
 CC
 XX Sequence 14 AA;
 SQ
 Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XXXXXVXHL 8
 Db 6 NQMAVGH 13
 RESULT 197
 AAW50957
 ID AAW50957 standard; peptide; 14 AA.
 XX
 XX AAW50957;
 AC
 XX 31-JUL-1998 (first entry)
 DT
 XX Bombesin analogue, [Leu13,psi(CH2NH)Leu14]-bombesin.
 DE Vasoactive intestinal peptide; VIP; antagonist; somatostatin; bombesin;
 KW Substance P; cancer; inhibition; growth hormone releasing factor.
 XX
 XX Synthetic.
 OS

FH Key Location/Qualifiers
 FT Modified-site 1
 FT Misc-difference 13..14 /note= "Pyroglutamic acid"
 FT Modified-site 14 /note= "a surrogate bond (CH2NH)"
 FT Modified-site 14 /note= "C-terminal amide"
 XX
 PN EP835662-A2.
 PD 15-APR-1998.
 XX
 PF 11-DEC-1996; 96EP-00309012.
 XX
 PR 08-OCT-1996; 96US-00727679.
 XX
 PA (NAIM-) NAT INST IMMUNOLOGY.
 PI Mukherjee R, Jaggi M;
 XX WPI; 1998-208959/19.
 DR
 XX Composition containing analogues of vasoactive intestinal peptide,
 PT somatostatin - bombesin and substance P, for treatment of tumours and for
 PT inhibiting over-expression of these peptide(s).
 XX
 PS Disclosure; Page 12; 49pp; English.
 XX
 CC The invention relates to a new composition which comprises: (i) the
 CC somatostatin analogue SOM2 AGCKNPFDMKPTSDC (3-14 disulphide bridge), and
 CC (ii) at least 4 of the peptides: antagonist of vasoactive intestinal
 CC peptide (VIP); VIP receptor-binding inhibitor (VIP2); VIP receptor
 CC antagonist (VIP3); somatostatin analogue (SOM1); bombesin antagonist
 CC (BOM1) and substance P antagonist (SP1). Also claimed are more general
 CC compositions containing peptide analogues of somatostatin, VIP, bombesin
 CC and substance P. The compositions are used in human or veterinary
 CC medicine: (a) to kill (or inhibit multiplication of) tumour or cancer
 CC cells, particularly for treatment of leukaemia, lymphoma, adenocarcinoma
 CC of stomach, pancreas or prostate, or cancer of lung, breast, kidney or
 CC particularly rectum and colon, and (b) to prevent, inhibit or modulate
 CC over-expression of, e.g. VIP. A wide range of cancer cells express
 CC receptors for VIP, somatostatin, bombesin and/or substance P. The present
 CC sequence represents a bombesin analogue
 XX
 SQ Sequence 14 AA:
 Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 : : : : :
 DB 6 NQMAVGH 13
 RESULT 198
 AAW52611
 ID AAW52611 standard; peptide; 14 AA.
 XX
 AC AAW52611;
 XX
 DT 22-JUN-1998 (first entry)
 XX
 DE Bombesin linear analogue peptide BIM-26027.
 XX
 KW Bombesin; linear; pseudopeptide bond; competitive inhibitor; cancer;
 XX tumour; gastric acid secretion; appetite.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 1 /note= "pyroglu"
 FT

FT Modified-site 10..11 /note= "pseudopeptide linkage -CH2NH-"
 FT Modified-site 14 /note= "Leu-NH2"
 XX
 PN US5723578-A.
 PD 03-MAR-1998.
 XX
 PF 07-JUN-1995; 95US-00488099.
 XX
 PR 24-SEP-1987; 87US-00100571.
 PR 25-MAR-1988; 88US-00173311.
 PR 08-JUN-1988; 88US-00204171.
 PR 16-JUN-1988; 88US-00207759.
 PR 23-SEP-1988; 88US-00246771.
 PR 14-OCT-1988; 88US-00257998.
 PR 09-DEC-1988; 88US-00282328.
 PR 02-MAR-1989; 89US-00317941.
 PR 07-JUL-1989; 89US-00376555.
 PR 21-AUG-1989; 89US-00397169.
 PR 30-MAR-1990; 90US-00502438.
 PR 18-OCT-1991; 91US-00779039.
 PR 10-NOV-1994; 94US-00337127.
 XX
 PA (BIOM-) BIOMEASURE INC.
 PA (TULA-) TULANE EDUCATIONL FUND.
 XX
 PI Kim SH, Coy DH, Moreau J;
 XX WPI; 1998-229235/20.
 DR
 XX Bombesin analogues - useful for treating cancer, etc.
 PT
 PS Claim 9; Col 16; 11pp; English.
 XX
 CC Bombesin is an amphibian peptide (closely related to mammalian gastrin-
 CC releasing peptide) which is an autocrine or paracrine mitotic factor for
 CC several human cancer cell lines. The patent discloses new linear peptide
 CC analogues of bombesin which have modified amino acids in various
 CC positions. More specifically, the peptides have, towards the C-terminal
 CC end, either a pseudopeptide bond or a statine or an AHPa residue to
 CC interfere with hydrogen bonding and thus hinder the formation of hairpin
 CC configuration upon which bombesin activity depends. The present sequence
 CC is a specifically claimed example of the new analogues. The peptides
 CC compete with bombesin for binding to receptors on target cells, but they
 CC fail to exhibit the activity of the naturally occurring peptide. They are
 CC useful for treating cancer, inhibiting gastric acid secretion and
 CC restoring appetite to cachectic patients. They can also be labelled and
 CC used for tumour imaging
 XX
 SQ Sequence 14 AA:
 Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHL 8
 : : : : :
 DB 6 NQMAVGH 13
 RESULT 199
 AAW92732
 ID AAW92732 standard; peptide; 14 AA.
 XX
 AC AAW92732;
 XX
 DT 20-MAR-2003 (revised)
 DT 30-APR-1999 (first entry)
 XX
 DE Amphibian bombesin peptide.
 XX

KM Bombesin; gastrin releasing peptide; GRP; GRF; litorin; proliferation;
 KM growth hormone releasing factor; treatment; benign; malignant; tissue;
 KM small-cell lung carcinoma; atherosclerosis; gastrointestinal disorder;
 KM diabetes; diabetes related retinopathy.

XX Amphibia.

XX Key Location/Qualifiers
 FT Modified-site 1 /note= "Residue is pyroglutamate"
 FT Modified-site 14 /note= "C-terminus amidated"

XX US587277-A.

XX 02-MAR-1999.

XX 10-NOV-1994; 94US-00337127.

XX 24-SEP-1987; 87US-00100571.

XX 25-MAR-1988; 88US-00173311.

XX 08-JUN-1988; 88US-00204171.

XX 16-JUN-1988; 88US-00207759.

XX 23-SEP-1988; 88US-00248771.

XX 14-OCT-1988; 88US-00257998.

XX 09-DEC-1988; 88US-00282328.

XX 02-MAR-1989; 89US-00317941.

XX 07-JUL-1989; 89US-00376555.

XX 21-AUG-1989; 89US-00397169.

XX 30-MAR-1990; 90US-00502438.

XX 18-OCT-1991; 91US-00779039.

XX (TULANE EDUCATIONAL FUND.

XX (BIOM-) BIOMEASURE INC.

XX Kim SH; Coy DH; Moreau J;

XX WPI; 1999-189718/16.

XX New peptides - useful for treating benign or malignant tissue

XX proliferation, gastrointestinal disorders and diabetes.

XX Disclosure; Col 25-26; 22pp; English.

XX This invention describes novel peptides which are analogues of litorin or
 CC the 10 amino acid carboxy-terminal region of mammalian gastrin releasing
 CC peptide or the 10 amino acid carboxy-terminal region of amphibian
 CC bombesin of formula (R1) (R2)Al-A2-Trp-A4-A5-A6-A7-W where Al = D-isomer
 CC of p-X-Phe, Trp or beta-Nal; X = F, Cl, Br, NO2, OH, H or Me; A2 = Gly,
 CC Ala, Val, Glu, Asn, Leu, Ile, Met, p-X-Phe, Trp, Cys, beta-Nal, His, 1-
 CC methyl-His or 3-methyl-His; A4 = Ala, Val, Glu, Asn, Gly, Leu, Ile, Nle,
 CC alpha-aminobutyric acid, Met, p-X-Phe, Trp, Cys or beta-Nal; A5 = Glu,
 CC Asn, Gly, Ala, Leu, Ile, Nle, alpha-aminobutyric acid, Met, Val, p-X-Phe,
 CC Trp, Thr or beta-Nal; A6 = Ser, Gly or D-isomer of Ala, N-methyl-Ala,
 CC Val, Glu, Asn, Leu, Ile, Met, p-X-Phe, Trp, Cys or beta-Nal; A7 = His or
 CC 1-methyl or 3-methyl-His; W = -N(R3)-CH(Z1)-R4-C(=O)V; R4 = CH2NH
 CC ; Z1, Z2 = Gly, Ala, Val, Leu, Ser, Asp, Asn, Glu, Gln, p-X-Phe,
 CC Trp, Cys, Met, Pro, Hypo or cyclohexylala; V = OH5 or NR6R7; R3, R5, R6,
 CC R7 = H, lower alkyl, phenyl(lower alkyl) or naphthyl(lower alkyl); R1, R2
 CC = H, 112C alkyl, 7-10C phenylalkyl or COEt; where R1 and R2 are bonded to
 CC the N-terminal amino acid of the peptide; B1 = 1-20C alkyl, 3-20C
 CC alkanyl, 3-20C alkanyl, Ph, naphthyl or 7-10C phenylalkyl; provided that
 CC when 1 of R1 and R2 is COEt, the other must be H. The peptides can be
 CC used for treating benign or malignant proliferation of tissue e.g. small-
 CC cell lung carcinoma, atherosclerosis, gastrointestinal disorders, and
 CC diabetes or diabetes related retinopathy. This sequence represents an
 CC amphibian bombesin peptide. (Updated on 20-MAR-2003 to correct PR field.)
 XX

XX Sequence 14 AA;

Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHL 8
 Db 6 NQNAVGH 13

RESULT 200
 AAY31061
 ID AAY31061 standard; peptide; 14 AA.

XX AAY31061;

XX 21-OCT-1999 (first entry)

XX Non-crosslinked protein particle peptide 110.

XX Non-crosslinked protein particle; diagnostic; therapy; monodisperse;
 KM albumin; haemoglobin; nanometer; micrometer; clearance.

XX Synthetic.

XX Key Location/Qualifiers
 FT Modified-site 1 /note= "pyroglutamic acid"
 FT Modified-site 14 /note= "C-terminal amide"

XX US5945033-A.

XX 31-AUG-1999.

XX 12-NOV-1996; 96US-00747137.

XX 15-JAN-1991; 91US-00641720.

XX 13-OCT-1992; 92US-00959560.

XX 01-JUN-1993; 93US-00069831.

XX 14-MAR-1994; 94US-00212546.

XX (HEMO-) HEMOSPHERE INC.

XX Yen RCK;

XX WPI; 1999-508153/42.

XX Non-crosslinked protein particles for therapeutic and diagnostic use.

XX Example 22; Col 95-96; 65pp; English.

XX This invention describes a novel aqueous suspension of monodisperse
 CC particles on non-crosslinked, non-denatured albumin (50-5000 nm) which is
 CC stable against dissolving upon dilution with an alcohol-free aqueous
 CC medium. The method involves (a) forming an aqueous solution containing
 CC albumin and hemoglobin and (b) treating the aqueous solution with an
 CC alcohol to cause the solution to become turbid. The particles are useful
 CC as agents for in vivo administration, either of their own administration
 CC or as a vehicle for other therapeutic or diagnostic agents. The method
 CC permits the formation of albumin and hemoglobin particles in the
 CC nanometer and micrometer size range, in a form closer to their natural
 CC form than the forms of the prior art. The particles therefore constitute
 CC a more closely controlled agent for in vivo administration, with greater
 CC ease of clearance from the body after their period of usefulness.
 CC AAY30952-Y31135 represent peptides used in the method of the invention
 XX

XX Sequence 14 AA;

Query Match 100.0%; Score 25; DB 2; Length 14;
 Best Local Similarity 50.0%; Pred. No. 2.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHL 8
 Db 6 NQNAVGH 13

Search completed: August 23, 2004, 11:10:31
Job time : 96 secs

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OM protein - protein search, using sw model

Run on: August 23, 2004, 10:56:47 ; Search time 89 Seconds
(without alignments)
25.398 Million cell updates/sec

Title: VARIANT2

Perfect score: 25

Sequence: 1 QXXVXHI 8

Scoring table: BLOSUM62DX

Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%

Listing first 200 summaries

Database : A.GeneSeq_29Jan04:.*
1: GeneSeqp1980s:.*
2: GeneSeqp1990s:.*
3: GeneSeqp2000s:.*
4: GeneSeqp2001s:.*
5: GeneSeqp2002s:.*
6: GeneSeqp2003as:.*
7: GeneSeqp2003bs:.*
8: GeneSeqp2004s:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	25	100.0	8	3	AA08309 Amino aci
2	25	100.0	8	3	AA08310 Amino aci
3	25	100.0	8	4	AAE10466 Synthetic
4	25	100.0	8	4	AAE10467 Synthetic
5	25	100.0	8	7	ABU08882 Antiangio
6	25	100.0	8	7	ABU08881 Antiangio
7	25	100.0	35	4	AAU17831 Novel hum
8	25	100.0	37	4	AA086667 Human imm
9	25	100.0	43	4	AA086543 Human imm
10	25	100.0	44	5	AA022575 Wooden le
11	25	100.0	47	4	AA014639 Peptide #
12	25	100.0	47	4	AB033599 Peptide #
13	25	100.0	47	4	AA027059 Peptide #
14	25	100.0	47	4	AB028419 Peptide #
15	25	100.0	47	4	AB019054 Protein #
16	25	100.0	47	4	AA066773 Human bon
17	25	100.0	47	4	AA054372 Human bra
18	25	100.0	47	4	AB048442 Human liv
19	25	100.0	47	4	AA002364 Peptide #
20	25	100.0	47	5	AB036428 Human pep
21	25	100.0	53	3	AA054011 Human pan
22	25	100.0	55	6	AAU45934 Propionib
23	25	100.0	55	6	AA042453 Streptococ
24	25	100.0	56	4	AB003789 Human mus
25	25	100.0	56	6	ABU13083 Novel hum

26	25	100.0	60	5	ABP75845 Human sec
27	25	100.0	64	2	AAV11419 Human 5'
28	25	100.0	65	4	AA074878 Human col
29	25	100.0	65	5	ABP63801 Human ORF
30	25	100.0	81	4	AA064900 Human kin
31	25	100.0	87	4	AAU27930 Human con
32	25	100.0	87	4	AAU19327 Human G p
33	25	100.0	88	4	AA092655 Human pro
34	25	100.0	88	6	ABP75406 Human sec
35	25	100.0	91	4	AA093111 Human dig
36	25	100.0	91	4	AA038627 Human col
37	25	100.0	91	5	AB097679 Human col
38	25	100.0	91	7	AB092935 Human col
39	25	100.0	92	5	AB055525 Lactococ
40	25	100.0	94	5	AB099244 Phosphori
41	25	100.0	96	3	AA034448 Arabidops
42	25	100.0	96	5	AB053633 Lactococ
43	25	100.0	100	3	AA002708 Human sec
44	25	100.0	101	6	AB082047 C. elegan
45	25	100.0	107	4	AA003068 Human pol
46	25	100.0	113	3	AA055412 Arabidops
47	25	100.0	117	3	AA055412 Arabidops
48	25	100.0	117	5	AB089102 Human pol
49	25	100.0	119	5	ABP05752 Human ORF
50	25	100.0	121	6	ADA33447 Actineto
51	25	100.0	126	6	ABU00139 Human nov
52	25	100.0	129	2	AA008249 Human cad
53	25	100.0	134	4	AA082581 S. epider
54	25	100.0	136	6	ABP80506 N. gonorr
55	25	100.0	143	3	AA041164 Human ORF
56	25	100.0	148	6	ABP79474 N. gonorr
57	25	100.0	151	4	AB068804 Drosophil
58	25	100.0	151	5	AB080807 Human lip
59	25	100.0	152	4	AA063223 Amino aci
60	25	100.0	152	6	AA029517 Human pho
61	25	100.0	157	7	AD039186 Novel hum
62	25	100.0	158	2	AA063044 RPLA2-8
63	25	100.0	158	4	AA082778 S. epider
64	25	100.0	159	4	AB065244 Novel hum
65	25	100.0	159	5	AB099217 Ribosoma
66	25	100.0	161	4	AAU49164 Propionib
67	25	100.0	161	6	AB045683 Streptococ
68	25	100.0	162	6	ABR41393 Human DIT
69	25	100.0	163	4	AA06157 Human imm
70	25	100.0	164	2	AA078156 Human sec
71	25	100.0	169	5	ABP64903 Human pro
72	25	100.0	170	5	AA047374 Rat phero
73	25	100.0	170	5	AA047385 Rat phero
74	25	100.0	170	5	AA047391 Rat phero
75	25	100.0	170	5	AA047392 Rat phero
76	25	100.0	172	4	AB07209 Novel hum
77	25	100.0	173	4	AB018197 Novel hum
78	25	100.0	181	6	AB069901 Photocorb
79	25	100.0	183	2	AA068871 Hepaticis
80	25	100.0	191	3	AA037616 Arabidops
81	25	100.0	191	3	AA037616 Arabidops
82	25	100.0	193	6	ABP72267 Human cer
83	25	100.0	194	4	AA072167 Human pro
84	25	100.0	194	7	AA059099 Human RNA
85	25	100.0	195	4	AB052791 Escherich
86	25	100.0	195	5	AB051436 Escherich
87	25	100.0	198	4	AA081948 S. epider
88	25	100.0	200	3	AA058855 Breast an
89	25	100.0	200	5	ABP41624 Human ova
90	25	100.0	202	6	AA047730 Human NOV
91	25	100.0	206	7	AA049778 Protein e
92	25	100.0	207	6	AB070558 Photocorb
93	25	100.0	209	4	AA079206 Human pro
94	25	100.0	212	4	AAU37626 Streptococ
95	25	100.0	212	6	ABU00572 Streptococ
96	25	100.0	212	6	ABP81534 Streptococ
97	25	100.0	212	6	ABU45820 Protein e
98	25	100.0	213	3	AA053046 Arabidops

99	25	100.0	213	3	AAG07579	Aag07579 Arabidops
100	25	100.0	213	4	ABG20132	Abg20132 Novel hum
101	25	100.0	215	2	AAR98160	Aar98160 NoCB prot
102	25	100.0	215	5	ABB48908	Abb48908 listeria
103	25	100.0	216	5	AAW79088	Aaw79088 Human sec
104	25	100.0	216	2	ABP61789	Abp61789 Human pol
105	25	100.0	216	6	ABU30667	Abu30667 Protein e
106	25	100.0	217	6	AAV84844	Aay84844 Protein e
107	25	100.0	217	5	ABU52145	Abu52145 Helicobac
108	25	100.0	217	6	ABU20649	Abu20649 Protein e
109	25	100.0	218	5	ABG77402	Abg77402 Selected
110	25	100.0	218	5	ABU11304	Abj11304 Yeast sel
111	25	100.0	219	3	AAG07578	Aag07578 Arabidops
112	25	100.0	219	4	ABM11692	Abm11692 Human pro
113	25	100.0	219	4	AAH80190	Aam80190 Human pro
114	25	100.0	219	4	ABG06039	Abg06039 Novel hum
115	25	100.0	219	6	ADA11866	Adl11866 Human nov
116	25	100.0	220	2	AAV36230	Aay36230 Human sec
117	25	100.0	220	5	ABU51588	Abu51588 Helicobac
118	25	100.0	220	6	ADA11720	Adl11720 Human nov
119	25	100.0	220	6	AAH41848	Aag41848 Human ORF
120	25	100.0	224	3	AAH418324	Aag418324 Arabidops
121	25	100.0	227	3	AAH42807	Aab42807 Human ORF
122	25	100.0	228	4	ABM61466	Abm61466 Drosophi1
123	25	100.0	229	2	AAV27341	Aay27341 Group B S
124	25	100.0	233	6	ABU20679	Abu20679 Protein e
125	25	100.0	234	6	ABM67953	Abm67953 Photorhab
126	25	100.0	235	5	ABP39305	Abp39305 Staphyloc
127	25	100.0	238	4	ABM67392	Abm67392 Drosophi1
128	25	100.0	239	4	AAU25571	Aau25571 Human G P
129	25	100.0	239	4	AAU14717	Aau14717 Novel bon
130	25	100.0	239	5	AAU74333	Aau74333 Human cyt
131	25	100.0	240	4	AAH94472	Aab94472 Human pro
132	25	100.0	240	4	AAH30407	Aau30407 Novel hum
133	25	100.0	240	5	ABR01767	Abt01767 Human bre
134	25	100.0	240	6	ABU00151	Abu00151 Human nov
135	25	100.0	244	2	AAW77619	Aaw77619 Mercutric
136	25	100.0	244	5	ABG70228	Abg70228 Human pre
137	25	100.0	245	2	AAW64220	Aaw64220 Human sec
138	25	100.0	245	2	AAH93721	Aan93721 Human pol
139	25	100.0	245	4	AAH90730	Aab90730 Human CG3
140	25	100.0	246	6	ABU43385	Abu43385 Protein e
141	25	100.0	247	6	ABM71246	Abm71246 Staphyloc
142	25	100.0	250	6	ABU19873	Abu19873 Protein e
143	25	100.0	250	7	ADC31828	Adc31828 Human nov
144	25	100.0	251	5	AAE20104	Aae20104 Lactobaci
145	25	100.0	253	3	AAW04738	Aaw04738 Wasp veno
146	25	100.0	253	6	ABP79577	Abp79577 N. gonorr
147	25	100.0	255	6	ADA35127	Adl35127 Acinetoba
148	25	100.0	261	3	AAH31274	Aag31274 Arabidops
149	25	100.0	261	6	ABP77401	Abp77401 N. gonorr
150	25	100.0	267	3	AAH29599	Aag29599 Arabidops
151	25	100.0	269	5	ABM54124	Abm54124 Lactococc
152	25	100.0	269	6	ABU25900	Abu25900 Protein e
153	25	100.0	271	3	AAH29598	Aag29598 Arabidops
154	25	100.0	271	5	ABH90834	Abh90834 Herbicida
155	25	100.0	275	2	AAH99571	Aar99571 Wasp veno
156	25	100.0	275	2	AAW04737	Aaw04737 Wasp veno
157	25	100.0	275	2	AAW52127	Aaw52127 Insectici
158	25	100.0	275	2	AAH31273	Aag31273 Arabidops
159	25	100.0	280	7	ADH63384	Adh63384 Rat Prote
160	25	100.0	280	7	ADH63392	Adh63392 Rat Prote
161	25	100.0	280	7	ADH63388	Adh63388 Rat Prote
162	25	100.0	280	7	ADH63458	Adh63458 Rat Prote
163	25	100.0	280	7	ADH63396	Adh63396 Rat Prote
164	25	100.0	280	7	ADH63462	Adh63462 Rat Prote
165	25	100.0	281	7	ADD46359	Add46359 Rat Prote
166	25	100.0	281	3	AAH31272	Aag31272 Arabidops
167	25	100.0	281	3	AAH53052	Aag53052 Arabidops
168	25	100.0	281	6	ABM71661	Abm71661 Staphyloc
169	25	100.0	283	5	ABG30846	Abg30846 Human tyr
170	25	100.0	284	3	AAH11106	Aag11106 Arabidops
171	25	100.0	285	3	AAH29597	Aag29597 Arabidops

172	25	100.0	285	6	ABM68471	Abm68471 Photorhab
173	25	100.0	285	6	ABR41580	Abt41580 Human DIT
174	25	100.0	287	3	AAH38076	Aag38076 Arabidops
175	25	100.0	289	4	ABG15271	Abg15271 Novel hum
176	25	100.0	292	4	AAH82170	Aag82170 S. epider
177	25	100.0	292	6	ABM73000	Abm73000 Staphyloc
178	25	100.0	295	6	ADB08044	Adb08044 Allolcoc
179	25	100.0	296	2	AAH39883	Aay39883 MHC Class
180	25	100.0	296	6	ABU05274	Abu05274 Human exp
181	25	100.0	296	6	ABU07242	Abu07242 Human exp
182	25	100.0	296	7	ADH63460	Adh63460 Human pro
183	25	100.0	296	7	ADH63398	Adh63398 Human pro
184	25	100.0	296	7	ADH63394	Adh63394 Human pro
185	25	100.0	296	7	ADH63386	Adh63386 Human pro
186	25	100.0	296	7	ADH63390	Adh63390 Human pro
187	25	100.0	296	7	ADH46361	Adh46361 Human pro
188	25	100.0	296	7	ADH63464	Adh63464 Human pro
189	25	100.0	297	2	AAH38784	Aay38784 Neisseria
190	25	100.0	297	3	AAH74947	Aay74947 Neisseria
191	25	100.0	297	5	ABP38279	Abp38279 Staphyloc
192	25	100.0	297	6	ABU23174	Abu23174 Protein e
193	25	100.0	298	4	AAU03198	Aau03198 Dynamin c
194	25	100.0	300	6	ABU40108	Abu40108 Protein e
195	25	100.0	303	7	ADH00079	Adh00079 Enterococ
196	25	100.0	304	6	ADA11625	Adl11625 Human nov
197	25	100.0	305	2	AAH97836	Aar97836 Kaposi's
198	25	100.0	305	2	AAH93612	Aar93612 Kaposi's
199	25	100.0	307	4	ABG29631	Abg29631 Novel hum
200	25	100.0	307	6	ABP77715	Abp77715 N. gonorr

ALIGNMENTS

RESULT 1	
ID	AAH08309 standard; peptide: 8 AA.
XX	AAH08309;
XX	04-DEC-2000 (first entry)
XX	
XX	Amino acid sequence of antiangiogenic peptide DT-26.
DE	Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
KW	VIP1; VIP2; VIP3; BOM1; bombesin; SP1; substance P; MuV-7; tumor growth;
KW	tumor angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
KW	leukemia; lymphoma.
XX	
XX	Synthetic.
OS	
XX	Key
PH	Misc-difference 1
FT	Location/Qualifiers
FT	Misc-difference 1
FT	/note= "D-form residue"
FT	Modified-site
FT	/label= Alb
FT	/note= "alpha-aminoisobutyric acid"
FT	Modified-site
FT	/note= "amidated residue"
XX	
XX	WO200047221-A1.
XX	17-AUG-2000.
XX	
XX	11-FEB-2000; 2000WO-US003559.
XX	
XX	11-FEB-1999; 99US-00248381.
XX	
XX	(NATM-) NAT INST IMMUNOLOGY.
PA	(DABU-) DABUR RES FOUND.
PA	(CORD/) CORD J I.
XX	
PI	Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;

PI Singh AT;
XX
DR WPI: 2000-549083/50.
XX
PT Novel therapeutically active composition comprising at least 5 peptides,
PT useful for treating angiogenesis especially as a result of
PT adenocarcinomas.
XX
PS Claim 11, Page 31; 42pp; English.
XX
XX AAB08304-15 represent peptides which have an antiangiogenic effect. The
CC specification describes therapeutically active compositions comprising at
CC least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
CC least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
CC VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
CC receptor antagonist), BOM1 (a bombesin antagonist), and SPI (a substance
CC P antagonist). The combination of these 7 analogues is known as Mu-7.
CC Mu-7 is used as an anticancer drug to restrict tumour growth and spread
CC by inhibiting tumour angiogenesis. Mu-7, in addition, inhibits
CC metastasis through its antiangiogenic activity in all cancers. The
CC peptides are useful for the treatment and prevention of angiogenesis,
CC especially as a result of adenocarcinomas of the colon, breast, lung,
CC prostate, kidney, leukemias or lymphomas
XX
SQ Sequence 8 AA:

Query Match 100.0%; Score 25; DB 3; Length 8;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 1 XXXVXNH 8
Db 1 FQWVXNH 8

RESULT 2
AAB08310
ID AAB08310 standard; peptide; 8 AA.
XX
AC AAB08310;
XX
DT 04-DEC-2000 (first entry)
XX
DE Amino acid sequence of antiangiogenic peptide DT-27.
XX
XX Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
XX VIP1; VIP2; VIP3; BOM1; bombesin; SPI; substance P; Mu-7; tumour growth;
XX tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
XX leukemia; lymphoma.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH Misc-difference 1 /note= "D-form residue"
FT Modified-site 6 /label= Alb
FT /note= "alpha-aminoisobutyric acid"
FT Modified-site 8 /note= "amidated residue"
XX
XX WO200047221-A1.
XX
XX 17-AUG-2000.
XX
XX 11-FEB-2000; 2000WO-US003559.
XX
XX 11-FEB-1999; 99US-00248381.
XX
XX (NAIM-) NAT INST IMMUNOLOGY.
XX (DABU-) DABUR RES FOUND.
XX (CORD/) CORD J I.
XX

PI Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;
PI Singh AT;
XX
DR WPI: 2000-549083/50.
XX
PT Novel therapeutically active composition comprising at least 5 peptides,
PT useful for treating angiogenesis especially as a result of
PT adenocarcinomas.
XX
PS Claim 11, Page 31; 42pp; English.
XX
XX AAB08304-15 represent peptides which have an antiangiogenic effect. The
CC specification describes therapeutically active compositions comprising at
CC least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
CC least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
CC VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
CC receptor antagonist), BOM1 (a bombesin antagonist), and SPI (a substance
CC P antagonist). The combination of these 7 analogues is known as Mu-7.
CC Mu-7 is used as an anticancer drug to restrict tumour growth and spread
CC by inhibiting tumour angiogenesis. Mu-7, in addition, inhibits
CC metastasis through its antiangiogenic activity in all cancers. The
CC peptides are useful for the treatment and prevention of angiogenesis,
CC especially as a result of adenocarcinomas of the colon, breast, lung,
CC prostate, kidney, leukemias or lymphomas
XX
SQ Sequence 8 AA:

Query Match 100.0%; Score 25; DB 3; Length 8;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 1 XXXVXNH 8
Db 1 FQWVXNH 8

RESULT 3
AAE10466
ID AAE10466 standard; peptide; 8 AA.
XX
AC AAE10466;
XX
DT 10-DEC-2001 (first entry)
XX
DE Synthetic peptide #4 possessing antagonist properties against bombesin.
XX
XX Bombesin; therapy; malignant disease; alpha, alpha-dialkylated amino acid;
XX cancer; cytostatic.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH Misc-difference 1 /note= "D-form residue"
FT Modified-site 4 /label= Alb
FT /note= "Alpha-aminoisobutyric acid"
FT Modified-site 8 /note= "C-terminal amide"
XX
XX WO200162777-A1.
XX
XX 30-AUG-2001.
XX
XX 31-JUL-2000; 2000WO-US020873.
XX
XX 24-FEB-2000; 2000IN-DE000147.
XX
XX (DABU-) DABUR RES FOUND.
XX (CORD/) CORD J I.
XX Burman AC, Prasad S, Mukherjee R, Jaggi M, Singh AT, Mathur A;
XX

DR WPI; 2001-582040/65.
XX New peptide or its salt that are antagonists to bombesin and bombesin
PT like peptides useful in the treatment of cancer.
XX
PS Claim 5; Page 22; 35pp; English.
XX
CC The present invention relates to a peptide or its salt that are
CC antagonists to bombesin and bombesin-like peptide. The invention is used
CC for treatment or prevention of cancer or malignant diseases in mammals.
CC The alpha, alpha-dialkylated amino acids present in the peptide analogues
CC induces highly specific constraints in the peptide backbone. The present
CC sequence is a synthetic peptide #1 possessing antagonist properties
CC against bombesin and bombesin-like peptide
XX
SQ Sequence 8 AA;

Query Match 100.0%; Score 25; DB 4; Length 8;
Best Local Similarity 75.0%; Pred. No. 1.4e+06;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 XXXVXHI 8
DB 1 XQWVXHI 8

RESULT 4
AAE10467
ID AAE10467 standard; peptide; 8 AA.
XX
AC AAE10467;
XX
DT 10-DEC-2001 (first entry)
XX
DE Synthetic peptide #5 possessing antagonist properties against bombesin.
XX
KW Bombesin; therapy; malignant disease; alpha, alpha-dialkylated amino acid;
KW cancer; cytostatic.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 6 /label= Aib
FT Modified-site 8 /note= "Alpha-aminoisobutyric acid"
FT Modified-site 8 /note= "C-terminal amide"
XX
PN WO200162777-A1.
XX
PD 30-AUG-2001.
XX
PP 31-JUL-2000; 2000WO-US020873.
XX
PR 24-FEB-2000; 2000IN-DE000147.
XX
PA (DABU-) DABUR RES FOUND.
PA (CORD/) CORD J I.
XX
PI Burman AC, Prasad S, Mukherjee R, Jaggi M, Singh AT, Mathur A;
XX
DR WPI; 2001-582040/65.
XX
XX New peptide or its salt that are antagonists to bombesin and bombesin
PT like peptides useful in the treatment of cancer.
XX
PS Claim 6; Page 22; 35pp; English.
XX
CC The present invention relates to a peptide or its salt that are
CC antagonists to bombesin and bombesin-like peptide. The invention is used
CC for treatment or prevention of cancer or malignant diseases in mammals.

CC The alpha, alpha-dialkylated amino acids present in the peptide analogues
CC induces highly specific constraints in the peptide backbone. The present
CC sequence is a synthetic peptide #1 possessing antagonist properties
CC against bombesin and bombesin-like peptide
XX
SQ Sequence 8 AA;

Query Match 100.0%; Score 25; DB 4; Length 8;
Best Local Similarity 75.0%; Pred. No. 1.4e+06;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 XXXVXHI 8
DB 1 XQWVXHI 8

RESULT 5
ABU08882
ID ABU08882 standard; peptide; 8 AA.
XX
AC ABU08882;
XX
DT 18-SEP-2003 (first entry)
XX
DE Antiangiogenic MuJ-7 synthetic peptide, DT-27.
XX
KW Angiogenesis; MuJ-7; anticancer; tumour; vasoactive intestinal peptide;
KW VIP; somatostatin; SOM; substance P; SP; bombesin; BOM; human;
KW cell proliferation; autocrine; antagonist; receptor binding inhibitor;
KW endothelial cell; cancer; hypersecretion; adenocarcinoma; colon; breast;
KW lung; prostate; kidney; leukaemia; lymphoma; cytostatic.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1 /note= "D-form residue"
FT Modified-site 6 /label= Aib
FT Modified-site 6 /note= "2-amino-isobutyric acid"
XX
FN US6492330-B1.
XX
PD 10-DEC-2002.
XX
PP 11-FEB-1999; 99US-00248381.
XX
PR 16-AUG-1996; 96IN-DE001822.
PR 08-OCT-1996; 96US-00727679.
PR 11-FEB-1998; 98IN-DE000342.
PR 02-APR-1998; 98US-0080433P.
XX
PA (NAIM-) NAT INST IMMUNOLOGY.
PA (DABU-) DABUR RES FOUND.
XX
PI Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;
XX
DR WPI; 2003-531016/50.
XX
XX An isolated peptide having specific sequence, useful for treating and/or
PT preventing angiogenesis, or for inhibiting the proliferation or migration
PT of tumor or cancer cells.
XX
PS Claim 1; Col 31; 22pp; English.
XX
CC The invention discloses an isolated peptide having a specific sequence,
CC which can be used for treating and/or preventing angiogenesis. Also
CC disclosed is the use of a combination of a peptides, termed MuJ-7, as an
CC anticancer drug in restricting tumour growth by inhibiting tumour
CC angiogenesis. Vasoactive intestinal peptide (VIP), Somatostatin (SOM),
CC Substance P (SP) and Bombesin (BOM) are all secreted by at least some
CC human tumour and cancer cells and there are binding sites for these

CC peptides on these cells. It may be that they aid cell proliferation
CC through an autocrine mechanism. Antagonists to these peptides (e.g. a
CC somatostatin analog, a VIP antagonist, a VIP receptor binding inhibitor,
CC a VIP receptor antagonist, a bombesin antagonist and a substance P
CC antagonist), or a combination comprises an amount of each peptide, may be
CC effective to inhibit the proliferation of endothelial cells, tumour or
CC cancer cells, to inhibit migration of tumour or cancer cells or to
CC modulate the hypersecretion of VIP, SOM, BOM or SP. The tumour or cancer
CC cells are adenocarcinomas of the colon, breast, lung, prostate or kidney,
CC or leukaemia or lymphoma. The sequence presented is the antiangiogenic
CC MuJ-7 synthetic peptide, DT-27

XX

SQ Sequence 8 AA;

Query Match 100.0%; Score 25; DB 7; Length 8;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
: : : : :
Db 1 FQWAVXHI 8

RESULT 6
ABU08881
ID ABU08881 standard; peptide; 8 AA.

XX

DT 18-SEP-2003 (first entry)

XX

DE Antiangiogenic MuJ-7 synthetic peptide, DT-26.

KW Angiogenesis; MuJ-7; anticancer; tumour; vasoactive intestinal peptide;
KW VIP; somatostatin; SOM; substance P; SP; bombesin; BOM; human;
KW cell proliferation; autocrine; antagonist; receptor binding inhibitor;
KW endothelial cell; cancer; hypersecretion; adenocarcinoma; colon; breast;
KW lung; prostate; kidney; leukaemia; lymphoma; cytostatic.

XX

OS Synthetic.

XX Key Location/Qualifiers
FH Misc-difference 1
FT Modified-site 4 /note= "D-form residue"

FT /label= Aib
FT /note= "2-amino-isobutyric acid"

XX

PN US6492330-B1.

XX

PD 10-DEC-2002.

XX

PF 11-FEB-1999; 99US-00248381.

XX

PR 16-AUG-1996; 96IN-DE001822.

XX

PR 08-OCT-1996; 96US-00727679.

XX

PR 11-FEB-1998; 98IN-DE000342.

XX

PR 02-APR-1998; 98US-0080433P.

XX

PA (NAIM-) NAT INST IMMUNOLOGY.

XX

PA (DABU-) DABUR RES FOUND.

XX

PI Mukherjee R, Jaggi M, Prasad S, Burman AC, Rajendran P, Mathur A;

XX

DR MPI; 2003-531016/50.

XX

PT An isolated peptide having specific sequence, useful for treating and/or

XX

PT preventing angiogenesis, or for inhibiting the proliferation or migration

XX

PS of tumor or cancer cells.

XX

PS Claim 1; Col 31; 22pp; English.

CC The invention discloses an isolated peptide having a specific sequence,
CC which can be used for treating and/or preventing angiogenesis. Also
CC disclosed is the use of a combination of a peptide, termed MuJ-7, as an
CC anticancer drug in restricting tumour growth by inhibiting tumour
CC angiogenesis. Vasoactive intestinal peptide (VIP), Somatostatin (SOM),
CC Substance P (SP) and Bombesin (BOM) are all secreted by at least some
CC human tumour and cancer cells and there are binding sites for these
CC peptides on these cells. It may be that they aid cell proliferation
CC through an autocrine mechanism. Antagonists to these peptides (e.g. a
CC somatostatin analog, a VIP antagonist, a VIP receptor binding inhibitor,
CC a VIP receptor antagonist, a bombesin antagonist and a substance P
CC antagonist), or a combination comprises an amount of each peptide, may be
CC effective to inhibit the proliferation of endothelial cells, tumour or
CC cancer cells, to inhibit migration of tumour or cancer cells or to
CC modulate the hypersecretion of VIP, SOM, BOM or SP. The tumour or cancer
CC cells are adenocarcinomas of the colon, breast, lung, prostate or kidney,
CC or leukaemia or lymphoma. The sequence presented is the antiangiogenic
CC MuJ-7 synthetic peptide, DT-26

XX

SQ Sequence 8 AA;

Query Match 100.0%; Score 25; DB 7; Length 8;
Best Local Similarity 62.5%; Pred. No. 1.4e+06;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
: : : : :
Db 1 FQWAVXHI 8

RESULT 7
AAU17831
ID AAU17831 standard; protein; 35 AA.

XX

AC AAU17831;

XX

DT 07-NOV-2001 (first entry)

XX

DE Novel human respiratory antigen #147.

KW Human; respiratory antigen; respiratory disorder; throat disorder;
KW lung disorder; nose disorder; lung cancer; gene therapy; cytostatic;
KW anti allergic; anti asthmatic; anti inflammatory; olfactory;

XX

OS Homo sapiens.

XX

PN WO20015448-A1.

XX

PD 02-AUG-2001.

XX

PF 17-JAN-2001; 2001WO-06001333.

XX

PR 31-JAN-2000; 2000US-0179065P.

XX

PR 04-FEB-2000; 2000US-0180628P.

XX

PR 24-FEB-2000; 2000US-0184664P.

XX

PR 02-MAR-2000; 2000US-0186350P.

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PR 16-MAR-2000; 2000US-0189874P.

XX

PR 17-MAR-2000; 2000US-0190076P.

XX

PR 18-APR-2000; 2000US-0198123P.

XX

PR 19-MAY-2000; 2000US-0205515P.

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PR 07-JUN-2000; 2000US-0209467P.

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PR 28-JUN-2000; 2000US-0214886P.

XX

PR 30-JUN-2000; 2000US-0215135P.

XX

PR 07-JUL-2000; 2000US-0216647P.

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PR 11-JUL-2000; 2000US-0217487P.

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PR 14-JUL-2000; 2000US-0218290P.

XX

PR 26-JUL-2000; 2000US-0220963P.

XX

PR 14-AUG-2000; 2000US-0224518P.

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PR 14-AUG-2000; 2000US-0224519P.

PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
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PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
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PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
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PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
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PR 14-SEP-2000; 2000US-0233063P.
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PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
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PR 02-OCT-2000; 2000US-0236802P.
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PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
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PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.

PR 08-NOV-2000; 2000US-0246523P.
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PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
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PR 17-NOV-2000; 2000US-0249213P.
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PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249246P.
PR 17-NOV-2000; 2000US-0249247P.
PR 17-NOV-2000; 2000US-0249248P.
PR 17-NOV-2000; 2000US-0249249P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.

(HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX WPI; 2001-476224/51.
XX N-PSDB; AAS28015.
XX
PT Isolated polypeptide for treating, preventing and/or prognosing
PT disorders related to the respiratory system including respiratory cancers
PT and also for testing and detection e.g. diagnosis.
XX
PS Claim 11; SEQ ID NO 449; 546pp; English.
XX
XX The present invention relates to the isolation of novel human respiratory
XX antigens, and cDNA (AAS27869-AAS28159) and genomic sequences encoding for
XX these polypeptides. The sequences of the invention are useful for
XX preventing, treating and/or prognosing disorders related to the
XX respiratory system including throat disorders (e.g. vocal cord paralysis,
XX tonsillitis, and laryngitis), lung disorders e.g. pneumonia, allergic
XX disorders e.g. asthma, pleurisy, cystic fibrosis, emphysema, nose
XX disorders and cancers of the respiratory tissues e.g. lung cancer. The
XX polynucleotide sequences of the invention are useful in gene therapy and
XX antisense therapy. AAU17685-AAU17975 represent novel human respiratory
XX antigens. Note: The sequence data for this patent did not form part of
XX the printed specification, but was obtained in electronic format directly
XX from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 35 AA;

Query Match 100.0%; Score 25; DB 4; Length 35;
Best Local Similarity 50.0%; Pred. No. 5.6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XXXXXVXHI 8
: : : : :
Db 25 KQERVVHI 32

RESULT 8

AA086667
ID AA086667 standard; protein; 37 AA.

XX AA086667;

DT 07-NOV-2001 (first entry)

XX Human immune/haematopoietic antigen SEQ ID NO:14260.

KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytoskeletal; gene therapy; vaccine; metastasis.

XX Homo sapiens.

PN W0200157182-A2.

PD 09-AUG-2001.

PF 17-JAN-2001; 2001WO-US001354.

XX 31-JAN-2000; 2000US-0179065P.

PR 04-FEB-2000; 2000US-0180628P.

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PR 11-JUL-2000; 2000US-0217486P.

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PR 14-AUG-2000; 2000US-0224518P.

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PR 14-AUG-2000; 2000US-0225214P.

PR 14-AUG-2000; 2000US-0225266P.

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PR 14-AUG-2000; 2000US-0225268P.

PR 14-AUG-2000; 2000US-0225272P.

PR 14-AUG-2000; 2000US-0225447P.

PR 14-AUG-2000; 2000US-0225757P.

PR 14-AUG-2000; 2000US-0225758P.

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PR 22-AUG-2000; 2000US-0226868P.

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PR 30-AUG-2000; 2000US-0228924P.

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PR 01-SEP-2000; 2000US-0229343P.

PR 01-SEP-2000; 2000US-0229344P.

PR 01-SEP-2000; 2000US-0229345P.

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PR 05-SEP-2000; 2000US-0229513P.

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PR 08-SEP-2000; 2000US-0231243P.

PR 08-SEP-2000; 2000US-0231244P.

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PR 08-SEP-2000; 2000US-0231414P.

PR 08-SEP-2000; 2000US-0232080P.

PR 08-SEP-2000; 2000US-0232081P.

PR 12-SEP-2000; 2000US-0231968P.

PR 14-SEP-2000; 2000US-0232397P.

PR 14-SEP-2000; 2000US-0232398P.

PR 14-SEP-2000; 2000US-0232399P.

PR 14-SEP-2000; 2000US-0232400P.

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PR 14-SEP-2000; 2000US-0233065P.

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PR 21-SEP-2000; 2000US-0234274P.

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PR 25-SEP-2000; 2000US-0234998P.

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PR 27-SEP-2000; 2000US-0235834P.

PR 27-SEP-2000; 2000US-0235836P.

PR 29-SEP-2000; 2000US-0236327P.

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PR 29-SEP-2000; 2000US-0236358P.

PR 29-SEP-2000; 2000US-0236359P.

PR 29-SEP-2000; 2000US-0236370P.

PR 02-OCT-2000; 2000US-0236802P.

PR 02-OCT-2000; 2000US-0237037P.

PR 02-OCT-2000; 2000US-0237038P.

PR 02-OCT-2000; 2000US-0237039P.

PR 02-OCT-2000; 2000US-0237040P.

PR 13-OCT-2000; 2000US-0239935P.

PR 13-OCT-2000; 2000US-0240960P.

PR 20-OCT-2000; 2000US-0241221P.

PR 20-OCT-2000; 2000US-0241785P.

PR 20-OCT-2000; 2000US-0241786P.

PR 20-OCT-2000; 2000US-0241787P.

PR 20-OCT-2000; 2000US-0241808P.

PR 20-OCT-2000; 2000US-0241809P.

PR 01-NOV-2000; 2000US-0241826P.

PR 01-NOV-2000; 2000US-0244617P.

PR 08-NOV-2000; 2000US-0246474P.

PR 08-NOV-2000; 2000US-0246475P.

PR 08-NOV-2000; 2000US-0246476P.

PR 08-NOV-2000; 2000US-0246477P.

PR 08-NOV-2000; 2000US-0246478P.

PR 08-NOV-2000; 2000US-0246523P.

PR 08-NOV-2000; 2000US-0246524P.

PR 08-NOV-2000; 2000US-0246525P.

PR 08-NOV-2000; 2000US-0246526P.

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PR 08-NOV-2000; 2000US-0246528P.

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PR 08-NOV-2000; 2000US-0246609P.

PR 08-NOV-2000; 2000US-0246610P.

PR 08-NOV-2000; 2000US-0246611P.

PR 08-NOV-2000; 2000US-0246613P.

PR 17-NOV-2000; 2000US-0249207P.

PR 17-NOV-2000; 2000US-0249208P.

PR 17-NOV-2000; 2000US-0249209P.

PR 17-NOV-2000; 2000US-0249210P.

PR 17-NOV-2000; 2000US-0249211P.

PR 17-NOV-2000; 2000US-0249212P.

PR 17-NOV-2000; 2000US-0249213P.

PR 17-NOV-2000; 2000US-0249214P.

PR 17-NOV-2000; 2000US-0249215P.

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PR 17-NOV-2000; 2000US-0249217P.

PR 17-NOV-2000; 2000US-0249218P.

PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249254P.
PR 17-NOV-2000; 2000US-0249255P.
PR 17-NOV-2000; 2000US-0249259P.
PR 17-NOV-2000; 2000US-0249292P.
PR 17-NOV-2000; 2000US-0249299P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
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PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
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PR 08-DEC-2000; 2000US-0251989P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM,
XX
DR WPI; 2001-483426/52.
DR N-PSDB; AAK59448.
XX
PT Nucleic acids encoding human immune/haematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
XX Claim 11; SEQ ID NO 14260; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 37 AA;
Query Match 100.0%; Score 25; DB 4; Length 37;
Best Local Similarity 50.0%; Pred. No. 6e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHH 8
Db 29 YQSLVHH 36
RESULT 9
ID AAM89543 standard; protein; 43 AA.
XX
AC AAM89543;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen SEQ ID NO:17136.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;

KW cytostatic; gene therapy; vaccine; metastasis.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
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PR 14-AUG-2000; 2000US-0225447P.
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PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
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PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
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PR 14-SEP-2000; 2000US-0232399P.
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PR 21-SEP-2000; 2000US-0234223P.
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PR	27-SEP-2000	2000US-02355836P
PR	29-SEP-2000	2000US-0236327P
PR	29-SEP-2000	2000US-0236327P
PR	29-SEP-2000	2000US-0236367P
PR	29-SEP-2000	2000US-0236368P
PR	29-SEP-2000	2000US-0236359P
PR	29-SEP-2000	2000US-0236370P
PR	02-OCT-2000	2000US-02370382P
PR	02-OCT-2000	2000US-0237037P
PR	02-OCT-2000	2000US-0237038P
PR	02-OCT-2000	2000US-0237039P
PR	02-OCT-2000	2000US-0237040P
PR	13-OCT-2000	2000US-0239395P
PR	13-OCT-2000	2000US-0239397P
PR	20-OCT-2000	2000US-0240960P
PR	20-OCT-2000	2000US-0241231P
PR	20-OCT-2000	2000US-0241785P
PR	20-OCT-2000	2000US-0241786P
PR	20-OCT-2000	2000US-0241787P
PR	20-OCT-2000	2000US-0241808P
PR	08-NOV-2000	2000US-0246477P
PR	08-NOV-2000	2000US-0246476P
PR	08-NOV-2000	2000US-0246537P
PR	08-NOV-2000	2000US-0246538P
PR	08-NOV-2000	2000US-0246532P
PR	08-NOV-2000	2000US-0246532P
PR	08-NOV-2000	2000US-0246609P
PR	08-NOV-2000	2000US-0246610P
PR	08-NOV-2000	2000US-0246611P
PR	08-NOV-2000	2000US-0246613P
PR	17-NOV-2000	2000US-0249207P
PR	17-NOV-2000	2000US-0249208P
PR	17-NOV-2000	2000US-0249209P
PR	17-NOV-2000	2000US-0249210P
PR	17-NOV-2000	2000US-0249211P
PR	17-NOV-2000	2000US-0249212P
PR	17-NOV-2000	2000US-0249213P
PR	17-NOV-2000	2000US-0249214P
PR	17-NOV-2000	2000US-0249215P
PR	17-NOV-2000	2000US-0249216P
PR	17-NOV-2000	2000US-0249217P
PR	17-NOV-2000	2000US-0249218P
PR	17-NOV-2000	2000US-0249244P
PR	17-NOV-2000	2000US-0249245P
PR	17-NOV-2000	2000US-0249246P
PR	17-NOV-2000	2000US-0249265P
PR	17-NOV-2000	2000US-0249297P
PR	17-NOV-2000	2000US-0249299P
PR	17-NOV-2000	2000US-0249300P
PR	01-DEC-2000	2000US-02505160P
PR	01-DEC-2000	2000US-02505391P
PR	05-DEC-2000	2000US-0251030P
PR	05-DEC-2000	2000US-0251030P
PR	05-DEC-2000	2000US-0251988P
PR	05-DEC-2000	2000US-0256719P
PR	06-DEC-2000	2000US-0251479P
PR	08-DEC-2000	2000US-0251856P
PR	08-DEC-2000	2000US-0251868P
PR	08-DEC-2000	2000US-0251869P
PR	08-DEC-2000	2000US-0251989P
PR	08-DEC-2000	2000US-0251990P
PR	11-DEC-2000	2000US-0254057P
PR	11-DEC-2000	2000US-0254067P
PR	05-JAN-2001	2000US-0259678P

XX	(HUMA-), HUMAN GENOME SCI INC.
PA	Rosen CA, Barash SC, Ruben SM,
P1	WPI; 2001-483426/52.
DR	N-PSDB; AAK6324.
XX	
PT	Nucleic acid encoding human immune/hematopoietic antigen polypeptides,
PR	useful for preventing, diagnosing and/or treating cancers and metastasis.
PS	Claim 11; SEQ ID NO 17136; 3071pp + Sequence Listing; English.
XX	
CC	AAK54951 to AAK64702 encode the human immune/hematopoietic antigen (I)
CC	amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC	activity, and can be used in gene therapy and vaccine production. (I)
CC	proteins and polynucleotides may be used in the prevention, diagnosis and
CC	treatment of diseases associated with inappropriate (I) expression. For
CC	example, they may be used to treat disorders associated with decreased
CC	expression by rectifying mutations or deletions in a patient's genome
CC	that affect the activity of (I) by expressing inactive proteins or to
CC	supplement the patients' own production of (I). Additionally, (I)
CC	polynucleotides may be used to produce the secreted (I), by inserting the
CC	nucleic acids into a host cell and culturing the cell to express the
CC	protein. (I) proteins and polynucleotides may be used to prevent,
CC	diagnose and treat immune/hematopoietic-related diseases, especially
CC	cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC	to AAK87694 represent human immune/hematopoietic antigen genomic
CC	sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC	represent sequences used in the exemplification of the present invention
SQ	
Sequence 43 AA;	
Query Match	100.0%; Score 25; DB 4; Length 43;
Best Local Similarity	50.0%; Pred. No. 7,1e+02;
Matches	4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Oy	1 XXXVXHI 8 : : : : 23 LQSGVWHI 30
Db	
RESULT 10	
AAC22575	
ID	AAO22575 standard; peptide; 44 AA.
XX	
AC	AAO22575;
XX	
DT	28-OCT-2002 (first entry)
XX	
DE	Wooden leg (WOL) gene related peptide #3.
XX	
KM	Wooden leg; WOL; vasculature; transgenic plant; agronomic; longer root;
XX	wood production; plant; promoter; tree; crop plant.
OS	Unidentified.
XX	
PN	WO20024337-A2.
XX	
PD	06-JUN-2002.
XX	
PF	29-NOV-2001; 2001WO-US045053.
XX	
PR	29-NOV-2000; 2000US-0253739P.
XX	
PA	(UTNY) UNIV NEW YORK STATE.
PA	(HELA/) HELARITUTTA Y.
PA	(MAHO/) MAHONEN A P.
PA	(BONK/) BONKE A W M.
PA	(KAUP/) KAUPPINEN L.
PA	(RIIK/) RIIKONEN M.
XX	
X1	Helariutta Y, Mahonen AP, Bonke AMW, Kauppinen L, Riiikonen M;

PI Benfey PN;
XX
XX WPI: 2002-599423/64.
XX
PT Novel isolated polypeptide (WOODEN LEG) with ability to regulate a set of
PT asymmetric cell divisions that establish vascular tissue in root and
PT hypocotyl development, useful for improving agronomically valuable
PT plants.
XX
XX Disclosure; Fig 3; 187pp; English.
XX
CC The invention relates to an isolated WOODEN LEG (WOL) polypeptide,
CC comprising 15 contiguous amino acids of a fully defined Arabidopsis
CC WOODEN LEG protein sequence of 1057 amino acids as given in the
CC specification, and to its encoding nucleic acid. The invention also
CC relates to an amino acid sequence of domains of protein, e.g., N-terminal
CC region, C-terminal domain, etc; or is a naturally occurring allelic
CC variant of the above mentioned polypeptide sequence. Expression levels of
CC the nucleic acid can be modified to improve the vasculature in transgenic
CC plants and enhance the agronomic properties of such plants. Also the WOL
CC promoter is used to drive expression of a heterologous coding sequence of
CC trees to improve wood production. The WOL nucleic acid may be used as a
CC molecular marker for a qualitative trait loci, e.g., longer roots or
CC enhanced wood production, in molecular breeding of crop plants. The
CC nucleic acid is also useful in DNA amplification assays to identify the
CC endogenous WOL genes, WOL mutant alleles and/or WOL expression products
CC in cultivars as compared to wild-type plants. They can also be used as
CC markers for linkage analysis of qualitative trait loci. The WOL protein
CC and/or antibodies can be used as diagnostic reagents in immunoassays to
CC detect expression of the WOL gene in cultivars and wild-type plants. The
CC WOL protein, its encoding nucleic acid, and its corresponding antibody
CC are useful for improving agronomically valuable plants e.g., trees. This
CC sequence represents a peptide relating to the wooden leg (WOL) protein of
CC the invention
XX
SQ Sequence 44 AA;
XX
Query Match 100.0%; Score 25; DB 5; Length 44;
Best Local Similarity 50.0%; Pred. No. 7.3e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 KQXXVXHI 8
DB 7 AQETVSHI 14
XX
RESULT 11
AAM14639
ID AAM14639 standard; protein; 47 AA.
XX
XX AAM14639;
AC
XX
DT 12-OCT-2001 (first entry)
XX
DE Peptide #1073 encoded by probe for measuring cervical gene expression.
XX
XX Probe; human; microarray; gene expression; cervical epithelial cell;
XX cervical cancer.
XX
XX Homo sapiens.
OS
XX
XX MO200157278-A2.
PN
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000670.
XX
XX 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
XX

PR 04-OCT-2000; 2000GB-00024263.
XX
XX (MOLE-) MOLECULAR DYNAMICS INC.
XX
XX Penn SG, Hanzel DK, Chen W, Rank DR;
XX WPI: 2001-488901/53.
XX
XX Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human cervical epithelial cells.
PT
XX
XX Claim 27; SEQ ID NO 19465; 487pp; English.
PS
XX
XX The present invention relates to human single exon nucleic acid probes
CC (SENP: see A110068-AA128459). The present sequence is a peptide encoded
CC by one such probe. The SENPs are derived from human Hela cells. The SENPs
CC can be used to produce a single exon microarray, which can be used for
CC measuring human gene expression in a sample derived from human cervical
CC epithelial cells. By measuring gene expression, the probes are therefore
CC useful in grading and/or staging of diseases of the cervix, notably
CC cervical cancer. Note: The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 47 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 47;
Best Local Similarity 50.0%; Pred. No. 7.9e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 KQXXVXHI 8
DB 32 KQKGVFHI 39
XX
RESULT 12
ABB33599
ID ABB33599 standard; peptide; 47 AA.
XX
XX ABB33599;
AC
XX
DT 04-FEB-2002 (first entry)
XX
DE Peptide #1105 encoded by human foetal liver single exon probe.
XX
XX Human; foetal liver; gene expression; single exon nucleic acid probe.
XX
XX Homo sapiens.
OS
XX
XX MO200157277-A2.
PN
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000669.
XX
XX 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
XX (MOLE-) MOLECULAR DYNAMICS INC.
XX
XX Penn SG, Hanzel DK, Chen W, Rank DR;
XX WPI: 2001-483447/52.
XX
XX Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human fetal liver.
PT
XX
XX Claim 27; SEQ ID NO 26234; 639pp + Sequence Listing; English.
PS

XX The invention relates to a single exon nucleic acid probe for measuring
 CC human gene expression in a sample derived from human foetal liver. The
 CC single exon nucleic acid probes may be used for predicting, measuring and
 CC displaying gene expression in samples derived from human foetal liver. The
 CC present sequence is a peptide encoded by a single exon nucleic acid probe
 CC of the invention. Note: The sequence data for this patent did not form
 CC part of the printed specification, but was obtained in electronic format
 CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 47 AA;

Query Match 100.0%; Score 25; DB 4; Length 47;
 Best Local Similarity 50.0%; Pred. No. 7.9e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
 : : : : :
 DB 32 KQKGVFHI 39

RESULT 13

AAM27059
 ID AAM27059 standard; protein; 47 AA.

XX
 AC AAM27059;

DT 17-OCT-2001 (first entry)

XX Peptide #1096 encoded by probe for measuring placental gene expression.

XX Probe: microarray; human; placenta; antenatal diagnosis;

KM genetic disorder.

XX Homo sapiens.

XX WO200157272-A2.

XX
 PD 09-AUG-2001.

XX 30-JAN-2001; 2001WO-US000663.

XX 04-FEB-2000; 2000US-0180312P.

XX 26-MAY-2000; 2000US-0207456P.

XX 30-JUN-2000; 2000US-00608408.

XX 03-AUG-2000; 2000US-00632366.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX (MOLE-) MOLECULAR DYNAMICS INC.

XX Penn SG, Hanzel DK, Chen W, Rank DR;

XX WPI; 2001-488897/53.

XX Human genome-derived single exon nucleic acid probes useful for analyzing

XX gene expression in human placenta.

XX Claim 27; SEQ ID NO 27328; 654bp; English.

XX The present invention relates to single exon nucleic acid probes (SENP;

CC see A1315-A157546). The present sequence is a peptide encoded by one

CC such probe. The probes are useful for producing a microarray for

CC predicting, measuring and displaying gene expression in samples derived

CC from human placenta. The probes are useful for antenatal diagnosis of

CC human genetic disorders

OY 1 XQXXVXHI 8
 : : : : :
 DB 32 KQKGVFHI 39

RESULT 14

ABB28419
 ID ABB28419 standard; peptide; 47 AA.

XX
 AC ABB28419;

DT 01-FEB-2002 (first entry)

XX Peptide #1070 encoded by breast cell single exon nucleic acid probe.

XX Human; microarray; single exon probe; gene expression; breast; disease;

KM cancer.

XX Homo sapiens.

XX WO200157271-A2.

XX 30-JAN-2001; 2001WO-US000662.

XX 04-FEB-2000; 2000US-0180312P.

XX 26-MAY-2000; 2000US-0207456P.

XX 30-JUN-2000; 2000US-00608408.

XX 03-AUG-2000; 2000US-00632366.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX (MOLE-) MOLECULAR DYNAMICS INC.

XX Penn SG, Hanzel DK, Chen W, Rank DR;

XX WPI; 2001-496933/54.

XX New spatially-addressable set of single exon nucleic acid probes, useful

XX for measuring gene expression in sample derived from human breast,

XX comprises number of single exon nucleic acid probes.

XX Claim 27; SEQ ID NO 11387; 327bp + Sequence Listing; English.

XX The invention relates to a spatially-addressable set of single exon

XX nucleic acid probes for measuring gene expression in a sample derived

XX from human breast and/or 474 cells. The method involves contacting the

XX probes with a collection of detectably labelled nucleic acids derived

XX from mRNA of human breast, and then measuring the label bound to each

XX probe of the microarray. The probes are useful for verifying the

XX expression of regions of genomic DNA predicted to encode proteins. They

XX are useful for gene discovery, and for determining predisposition and/or

XX prognosing breast disease. Gene expression analysis is useful for

XX assessing the toxicity of chemical agents on cells. The microarray of

XX this invention presents a far greater diversity of probes for measuring

XX gene expression, with far less bias than expressed sequence tag

XX microarrays. The method is suitable for rapid production of functional

XX information from genomic sequence. The present sequence is a peptide

XX encoded by a single exon nucleic acid probe of the invention. Note: The

XX sequence data for this patent did not form part of the printed

XX specification, but was obtained in electronic format directly from WIPO

XX at ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 47 AA;

Query Match 100.0%; Score 25; DB 4; Length 47;
 Best Local Similarity 50.0%; Pred. No. 7.9e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8

Db 32 KQKGVFHI 39

RESULT 15
ABB19054
ID ABB19054 standard; protein; 47 AA

Query Match	100.0%	Score 25;	DB 4;	Length 47;
Best Local Similarity	50.0%;	Pred. No. 7.9e+02;		
Matches 4;	Conservative 4;	Mismatches 0;	Indels 0;	Gaps 0;

QY	1	XQXVXHI	8
		: : :	
Db	32	KQKGVFHI	39

RESULT 16
AAM66773
ID AAM66773 standard; protein; 47 AA

AC	AAM66773;
XX	
DT	06-NOV-2001 (first entry)

Query Match	100.0%	Score 25;	DB 4;	length 47;
Best Local Similarity	50.0%;	Pred. No. 7.9e+02;		
Matches 4;	Conservative 4;	Mismatches 0;	Indels 0;	Gaps 0;

Qy	1	XQXXVXHI	8
		: :: :	
Db	32	KQKGVFHI	39

RESULT 17
AAM54372
ID AAM54372 standard; protein; 47 AA

PF 30-JAN-2001; 2001WO-US000667.
XX
XX 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
XX (MOLE-) MOLECULAR DYNAMICS INC.
PA Penn SG, Hanzel DK, Chen W, Rank DR;
XX WPI; 2001-483446/52.
XX
XX Single exon nucleic acid probes for analyzing gene expression in human
PT brains.
XX
XX Example 4; SEQ ID NO 26477; 650bp + Sequence Listing; English.
XX
XX The present invention provides a number of single exon nucleic acid
CC probes which are derived from genomic sequences expressed in the human
CC brain. They can be used to measure gene expression in brain cell samples,
CC which may enable the diagnosis and improved treatment of nervous system
CC diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC epilepsy and cancer. The present sequence is a protein encoded by one of
CC the probes of the invention
XX
XX Sequence 47 AA;
SQ
Query Match 100.0%; Score 25; DB 4; Length 47;
Best Local Similarity 50.0%; Pred. No. 7.9e+02; Indels 0; Gaps 0;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHI 8
DB 32 KQKGVFHI 39
RESULT 18
ABG48442
ID ABG48442 standard; peptide; 47 AA.
XX
XX ABG48442;
AC
XX 25-FEB-2003 (first entry)
DT
XX Human liver peptide, SEQ ID No 27090.
DE
XX
XX Human, liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
KM hypercholesterolaemia; coronary heart disease.
XX
XX Homo sapiens.
OS
XX WO200157273-A2.
PN
XX 09-AUG-2001.
PD
XX 30-JAN-2001; 2001WO-US000664.
PF
XX 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
XX (MOLE-) MOLECULAR DYNAMICS INC.
PA Penn SG, Hanzel DK, Chen W, Rank DR;
XX
XX

DR WPI; 2001-488898/53.
XX
XX Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human adult liver.
XX
XX Claim 27; SEQ ID NO 27090; 658bp; English.
XX
XX The invention relates to a single exon nucleic acid probe (SENP) (I) for
CC measuring human gene expression in a sample derived from human adult
CC liver, comprising one of 13109 defined nucleotide sequences given in the
CC specification (or complements/ fragments). The probe hybridises at high
CC stringency to a nucleic acid molecule expressed in the human adult liver.
CC (I) may be used for predicting, measuring and displaying gene expression
CC in samples derived from human adult liver. The genes identified may be
CC involved in genetic liver diseases such as cirrhosis,
CC hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is
CC associated with coronary heart disease. ABG47348-ABG59930 represent human
CC liver single exon encoded peptides of the invention. Note: The sequence
CC information for this patent does not appear in the printed specification
CC but was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 47 AA;
SQ
Query Match 100.0%; Score 25; DB 4; Length 47;
Best Local Similarity 50.0%; Pred. No. 7.9e+02; Indels 0; Gaps 0;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHI 8
DB 32 KQKGVFHI 39
RESULT 19
AAM02364
ID AAM02364 standard; protein; 47 AA.
XX
XX AAM02364;
AC
XX 09-OCT-2001 (first entry)
DT
XX Peptide #1046 encoded by probe for measuring breast gene expression.
DE
XX
XX Probe; human; breast disease; breast cancer; development disorder;
KM inflammatory disease; proliferative breast disease; non-carcinoma tumour.
XX
XX Homo sapiens.
OS
XX WO200157270-A2.
PN
XX 09-AUG-2001.
PD
XX 29-JAN-2001; 2001WO-US000661.
PF
XX 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
XX (MOLE-) MOLECULAR DYNAMICS INC.
PA Penn SG, Hanzel DK, Chen W, Rank DR;
XX
XX WPI; 2001-476286/51.
XX
XX Novel single exon nucleic acid probe used to measuring gene expression in
PT a human breast.
XX
XX Claim 27; SEQ ID NO 11104; 322bp; English.
PS
XX

CC The present invention relates to novel single exon nucleic acid probes
 CC (see AAI00010-AA110067). The present sequence is a peptide encoded by one
 CC probe. The probes are useful for measuring human gene expression in
 CC a human breast sample, where the probe hybridises at high stringency to a
 CC nucleic acid expressed in the human breast. The probes are useful for
 CC predicting, diagnosing, grading, staging, monitoring and prognosing
 CC diseases of the human breast, particularly those diseases with polygenic
 CC aetiology. The diseases include: breast cancer, disorders of development,
 CC inflammatory diseases of the breast, fibrocystic changes, proliferative
 CC breast disease and non-carcinoma tumours. Note: The sequence data for
 CC this patent did not form part of the printed specification, but was
 CC obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 CC Sequence 47 AA;
 CC
 CC Query Match 100.0%; Score 25; DB 4; Length 47;
 CC Best Local Similarity 50.0%; Pred. No. 7.9e+02;
 CC Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC Oy 1 XXXVXHI 8
 CC :|::|:
 CC Db 32 KQKGVFHI 39
 CC
 CC RESULT 20
 CC ABB36428
 CC ID ABB36428 standard; peptide; 47 AA.
 CC
 CC AC ABB36428;
 CC
 CC DT 19-AUG-2002 (first entry)
 CC
 CC DE Human peptide encoded by genome-derived single exon probe SEQ ID 26093.
 CC
 CC XX Human; single exon probe; asthma; lung cancer; COPD; ILD;
 CC chronic obstructive pulmonary disease; interstitial lung disease;
 CC familial idiopathic pulmonary fibrosis; neurofibromatosis;
 CC tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
 CC Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
 CC pulmonary histiocytosis; lymphangioleiomyomatosis; Karsagen syndrome;
 CC pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
 CC primary ciliary dyskinesia; pulmonary hypertension;
 CC hyaline membrane disease.
 CC
 CC XX Homo sapiens.
 CC
 CC OS
 CC PN WO200186003-A2.
 CC
 CC PD 15-NOV-2001.
 CC
 CC PF 30-JAN-2001; 2001WO-US000665.
 CC
 CC XX 04-FEB-2000; 2000US-0180312P.
 CC PR 26-MAY-2000; 2000US-0207456P.
 CC PR 30-JUN-2000; 2000US-00608408.
 CC PR 03-AUG-2000; 2000US-00632366.
 CC PR 21-SEP-2000; 2000US-02346687P.
 CC PR 27-SEP-2000; 2000US-0236359P.
 CC PR 04-OCT-2000; 2000GB-00024263.
 CC
 CC PA (MOLE-) MOLECULAR DYNAMICS INC.
 CC
 CC PI Penn SG, Hanzel DK, Chen W, Rank DR;
 CC
 CC DR WPI; 2002-114183/15.
 CC
 CC XX Spatially-addressable set of single exon nucleic acid probes, used to
 CC PT measure gene expression in human lung samples.
 CC
 CC PS Claim 27; SEQ ID NO 26093; 634pp; English.
 CC
 CC XX The invention relates to a spatially-addressable set of single exon

CC nucleic acid probes for measuring gene expression in a sample derived
 CC from human lung comprising single exon nucleic acid probes having one of
 CC 12614 nucleic acid sequences mentioned in the specification, or their
 CC complements or the 12387 open reading frames derived from the 12614
 CC probes. Also included are a microarray comprising the novel set of probes
 CC; the novel set of probes which hybridise at high stringency to a nucleic
 CC acid expressed in the human lung; measuring gene expression in a sample
 CC derived from human lung, comprising (a) contacting the array with a
 CC collection of detectably labeled nucleic acids derived from human lung
 CC mRNA, and (b) measuring the label detectably bound to each probe of the
 CC array; identifying exons in a eukaryotic genome, comprising (a)
 CC algorithmically predicting at least one exon from genomic sequences of
 CC the eukaryote; and (b) detecting specific hybridisation of detectably
 CC labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
 CC having a fragment identical to the predicted exon, the probe is included
 CC in the above mentioned microarray; assigning exons to a single gene,
 CC comprising (a) identifying exons from genomic sequence by the method
 CC above and (b) measuring the expression of each of the exons in several
 CC tissues and/or cell types using hybridisation to a single exon
 CC microarrays having a probe with the exon, where a common pattern of
 CC expression of the exons in the tissues and/or cell types indicates that
 CC the exons should be assigned to a single gene; a peptide comprising one
 CC of 12011 sequences, mentioned in the specification, or encoded by the
 CC probes/open reading frames (ORF). The probes are used for gene expression
 CC analysis, and for identifying exons in a gene, particularly using human
 CC lung derived mRNA and for the study of lung diseases such as asthma, lung
 CC cancer, chronic obstructive pulmonary disease (COPD), interstitial lung
 CC disease (ILD), familial idiopathic pulmonary fibrosis, neurofibromatosis,
 CC tuberous sclerosis, Gaucher's disease, Niemann-Pick disease, Hermansky-
 CC Pudlak syndrome, sarcoidosis, pulmonary haemosiderosis, pulmonary
 CC histiocytosis, lymphangioleiomyomatosis, pulmonary alveolar proteinosis,
 CC Karsagen syndrome, fibrocystic pulmonary dysplasia, primary ciliary
 CC dyskinesia, pulmonary hypertension and hyaline membrane disease. The
 CC present sequence is a peptide/protein encoded by a single exon probe of
 CC the invention. Note: The sequence data for this patent did not form part
 CC of the printed specification, but was obtained in electronic format
 CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
 CC
 CC SQ Sequence 47 AA;
 CC
 CC Query Match 100.0%; Score 25; DB 5; Length 47;
 CC Best Local Similarity 50.0%; Pred. No. 7.9e+02;
 CC Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC Oy 1 XXXVXHI 8
 CC :|::|:
 CC Db 32 KQKGVFHI 39
 CC
 CC RESULT 21
 CC AAB54011
 CC ID AAB54011 standard; protein; 53 AA.
 CC
 CC AC AAB54011;
 CC
 CC DT 09-MAR-2001 (first entry)
 CC
 CC DE Human pancreatic cancer antigen protein sequence SEQ ID NO:463.
 CC
 CC XX Human; pancreas; pancreatic cancer; pancreatic cancer antigen; detection;
 CC diagnosis; identification; cytostatic; neuroprotective; nootropic;
 CC immunomodulatory; relaxant; contraceptive; gynaecological;
 CC antiinflammatory; cardiant; gene therapy; chromosome mapping;
 CC linkage analysis; tissue identification; tissue typing; forensic; neural;
 CC immune system; muscular; reproductive; gastrointestinal; pulmonary;
 CC cardiovascular; renal; proliferative.
 CC
 CC XX Homo sapiens.
 CC
 CC OS
 CC PN WO200055320-A1.
 CC
 CC PD 21-SEP-2000.
 CC
 CC XX

PF 08-MAR-2000; 2000WO-US005989.
 XX 12-MAR-1999; 99US-0124270P.
 XX (HUMA-) HUMAN GENOME SCT INC.
 PA Rosen CA, Ruben SM;
 PI WPI: 2000-579444/54.
 DR N-PSDB; AAC98776.
 XX New nucleic acid that is a pancreatic cancer antigen for preventing,
 PT treating, or ameliorating a medical condition, particular pancreatic
 PT cancer, or for use in assays for diagnosing a pathological condition.
 XX Claim 11, Page 903; 1379pp; English.
 PS AAC98773 to AAC99231 encode the human pancreatic cancer associated
 XX proteins, called pancreatic cancer antigens, given in AAB54008 to
 CC AAB54466. The human pancreatic cancer antigens have cytostatic,
 CC neuroprotective, nootropic, immunomodulatory, relaxant, contraceptive,
 CC gynaecological, cardiant and antiinflammatory activities, and can be used
 CC in gene therapy. The polynucleotide and proteins can be used for
 CC preventing, treating, or ameliorating a medical condition or in assays
 CC for diagnosing a pathological condition or a susceptibility to one in a
 CC subject. Binding partners to the proteins and the activity of the
 CC proteins can be identified. The pancreatic cancer antigens can be used to
 CC detect, treat or prevent pancreatic disorders, especially cancer.
 CC Agonists and antagonists to the antigens can be screened for. The
 CC pancreatic cancer antigen polynucleotides can be used to design nucleic
 CC acid hybridization probes that can be used in chromosome mapping, linkage
 CC analysis, tissue identification and/or typing and a variety of forensic
 CC and diagnostic methods. The proteins can be used to generate antibodies
 CC which are used to purify, detect and target the polypeptides, including
 CC both in vivo and in vitro diagnostic and therapeutic methods. The
 CC proteins can be used to treat or prevent neural, immune system, muscular,
 CC reproductive, gastrointestinal, pulmonary, cardiovascular, renal or
 CC proliferative disorders. AAC99232 to AAC99240 and AAB54467 represent
 CC sequences used in the exemplification of the present invention
 XX
 SQ Sequence 53 AA;
 XX
 QY 1 XQXXVXHI 8
 Db :|::|::|
 24 QQIRVSHI 31
 Query Match 100.0%; Score 25; DB 3; Length 53;
 Best Local Similarity 50.0%; Pred. No. 9.1e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

RESULT 22
 AAU45934
 ID AAU45934 standard; protein; 55 AA.
 XX
 AC AAU45934;
 XX
 DT 27-FEB-2002 (first entry)
 XX
 DE Propionibacterium acnes immunogenic protein #6830.
 XX
 KW SAHO syndrome; synovitis; acne; pustulosis; hypertois; osteomyelitis;
 KW uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;
 KW inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;
 KW dermatological; osteopathic; neuroprotectant.
 XX
 OS Propionibacterium acnes.
 XX
 PN WO200181581-A2.
 XX
 PD 01-NOV-2001.
 XX
 PF 20-APR-2001; 2001WO-US012865.
 XX

XX 21-APR-2000; 2000US-0199047P.
 PR 02-JUN-2000; 2000US-0208841P.
 PR 07-JUL-2000; 2000US-0216747P.
 XX
 XX (CORI-) CORIXA CORP.
 XX
 PI Skeiky YAM, Persing DH, Mitcham JL, Wang SS, Bhatia A;
 PI L'maisonneuve J, Zhang Y, Jen S, Carter D;
 DR WPI: 2001-616774/71.
 DR N-PSDB; AAS59529.
 XX
 XX Propionibacterium acnes polypeptides and nucleic acids useful for
 PT vaccinating against and diagnosing infections, especially useful for
 PT treating acne vulgaris.
 PT
 XX Example 1; SEQ ID NO 7129; 1069pp; English.
 PS
 XX Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic
 CC polypeptides. The proteins and their associated DNA sequences are used in
 CC the treatment, prevention and diagnosis of medical conditions caused by
 CC P. acnes. The disorders include SAHO syndrome (synovitis, acne,
 CC pustulosis, hypertois and osteomyelitis), uveitis and endophthalmitis.
 CC P. acnes is also involved in infections of bone, joints and the central
 CC nervous system, however it is particularly involved in the inflammatory
 CC lesions associated with acne vulgaris. A method for detecting the
 CC presence or absence of P. acnes in a patient comprises contacting a
 CC sample with a binding agent that binds to the proteins of the invention
 CC and determining the amount of bound protein in the sample. The
 CC polypeptides may be used as antigens in the production of antibodies
 CC specific for P. acnes proteins. These antibodies can be used to
 CC downregulate expression and activity of P. acnes polypeptides and
 CC therefore treat P. acnes infections. The antibodies may also be used as
 CC diagnostic agents for determining P. acnes presence, for example, by
 CC enzyme linked immunosorbent assay (ELISA). Note: The sequence data for
 CC this patent did not form part of the printed specification, but was
 CC obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 55 AA;
 XX
 QY 1 XQXXVXHI 8
 Db :|::|::|
 10 TORVVRHI 17
 Query Match 100.0%; Score 25; DB 4; Length 55;
 Best Local Similarity 50.0%; Pred. No. 9.5e+02;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

RESULT 23
 ABM42453
 ID ABM42453 standard; protein; 55 AA.
 XX
 AC ABM42453;
 XX
 DT 20-OCT-2003 (first entry)
 XX
 DE Propionibacterium acnes predicted ORF-encoded polypeptide #7129.
 XX
 KW Acne vulgaris; antiseborrheic; dermatological; antibacterial;
 KW immunostimulant; immune response; vaccine.
 XX
 OS Propionibacterium acnes.
 XX
 PN WO2003033515-A1.
 XX
 PD 24-APR-2003.
 XX
 PF 11-OCT-2002; 2002WO-US032727.
 XX
 PF 15-OCT-2001; 2001US-00978825.
 XX

XX (CORI-) CORIXA CORP.
XX
PA Mitcham JL, Skeiky YAM, Persing DH, Bhatia A, Maisonneuve JL,
PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DE, Jones R, Carter D;
PI Barth B, Vallieve-Douglas J;
XX WPI: 2003-381789/36.
DR N-PDSB; ACF64458.
XX
XX New Propionibacterium acnes polypeptides and polynucleotides encoding the
PT polypeptide, useful for diagnosing, preventing or treating acne vulgaris,
PT or for stimulating an immune response specific for a P. acnes protein.
XX
PS Example 1; SEQ ID NO 7129; 1481bp; English.

The invention relates to an isolated polynucleotide (ACF64435-ACF64733) encoding a Propionibacterium acnes protein. The invention also relates to polypeptides encoded by the polynucleotides (ABM35624-ABM64536) and to immunogenic fragments of P. acnes polypeptides. The invention additionally encompasses expression vectors and host cells comprising a polynucleotide of the invention; antibodies against polypeptides of the invention; fusion proteins comprising a polypeptide of a P. acnes method for stimulating an immune response specific for a P. acnes polypeptide and an isolated T cell population comprising T cells prepared via this method; a vaccine composition (comprising P. acnes polypeptides, polynucleotides, antibodies, fusion proteins, T cell populations, or antigen-presenting cells that express the polypeptide); a method and kit for detecting or determining the presence or absence of P. acnes in a patient; and a method for inhibiting the development of P. acnes in a patient. The P. acnes polypeptides, polynucleotides, antibodies, fusion proteins, T cell populations or antigen-presenting cells that express the polypeptides are useful for diagnosing, preventing or treating acne vulgaris, or for stimulating an immune response specific for a P. acnes protein. The polynucleotides can also be used as probes or primers for nucleic acid hybridisation. The vaccine composition is useful for the stimulation of an immune response against P. acnes, or for treating acne, and the kit is useful for performing a diagnostic assay. The present sequence represents a polypeptide predicted to be encoded by an ORF (open reading frame) contained within the P. acnes polynucleotides of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 55 AA;

Query Match 100.0%; Score 25; DB 6; Length 55;
Best Local Similarity 50.0%; Pred. No. 9.5e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXXVXHHI 8
: : : : :
Db 10 TORVVRIH 17

RESULT 24
ABB03789 standard; protein; 56 AA.
ID ABB03789
XX ABB03789;
XX
DT 08-JAN-2002 (first entry)
XX Human musculoskeletal system related polypeptide SEQ ID NO 1736.
XX
XX Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antifungal;
KW vulnereary; anticonvulsant; antibacterial; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein;
KW musculoskeletal system.
XX Homo sapiens.
XS

PR 27-SEP-2000; 2000US-0235836P.
 PR 29-SEP-2000; 2000US-0236327P.
 PR 29-SEP-2000; 2000US-0236367P.
 PR 29-SEP-2000; 2000US-0236368P.
 PR 29-SEP-2000; 2000US-0236369P.
 PR 02-OCT-2000; 2000US-0236802P.
 PR 02-OCT-2000; 2000US-0237037P.
 PR 02-OCT-2000; 2000US-0237038P.
 PR 02-OCT-2000; 2000US-0237039P.
 PR 02-OCT-2000; 2000US-0237040P.
 PR 13-OCT-2000; 2000US-0239933P.
 PR 13-OCT-2000; 2000US-0239937P.
 PR 20-OCT-2000; 2000US-0240960P.
 PR 20-OCT-2000; 2000US-0241222P.
 PR 20-OCT-2000; 2000US-0241785P.
 PR 20-OCT-2000; 2000US-0241786P.
 PR 20-OCT-2000; 2000US-0241787P.
 PR 20-OCT-2000; 2000US-0241808P.
 PR 20-OCT-2000; 2000US-0241809P.
 PR 20-OCT-2000; 2000US-0241825P.
 PR 01-NOV-2000; 2000US-0244617P.
 PR 08-NOV-2000; 2000US-0246474P.
 PR 08-NOV-2000; 2000US-0246475P.
 PR 08-NOV-2000; 2000US-0246476P.
 PR 08-NOV-2000; 2000US-0246477P.
 PR 08-NOV-2000; 2000US-0246478P.
 PR 08-NOV-2000; 2000US-0246523P.
 PR 08-NOV-2000; 2000US-0246524P.
 PR 08-NOV-2000; 2000US-0246525P.
 PR 08-NOV-2000; 2000US-0246526P.
 PR 08-NOV-2000; 2000US-0246527P.
 PR 08-NOV-2000; 2000US-0246528P.
 PR 08-NOV-2000; 2000US-0246532P.
 PR 08-NOV-2000; 2000US-0246609P.
 PR 08-NOV-2000; 2000US-0246610P.
 PR 08-NOV-2000; 2000US-0246611P.
 PR 08-NOV-2000; 2000US-0246613P.
 PR 17-NOV-2000; 2000US-0249207P.
 PR 17-NOV-2000; 2000US-0249208P.
 PR 17-NOV-2000; 2000US-0249209P.
 PR 17-NOV-2000; 2000US-0249210P.
 PR 17-NOV-2000; 2000US-0249211P.
 PR 17-NOV-2000; 2000US-0249212P.
 PR 17-NOV-2000; 2000US-0249213P.
 PR 17-NOV-2000; 2000US-0249214P.
 PR 17-NOV-2000; 2000US-0249215P.
 PR 17-NOV-2000; 2000US-0249216P.
 PR 17-NOV-2000; 2000US-0249217P.
 PR 17-NOV-2000; 2000US-0249218P.
 PR 17-NOV-2000; 2000US-0249244P.
 PR 17-NOV-2000; 2000US-0249245P.
 PR 17-NOV-2000; 2000US-0249264P.
 PR 17-NOV-2000; 2000US-0249265P.
 PR 17-NOV-2000; 2000US-0249297P.
 PR 17-NOV-2000; 2000US-0249299P.
 PR 17-NOV-2000; 2000US-0249300P.
 PR 01-DEC-2000; 2000US-0250160P.
 PR 01-DEC-2000; 2000US-0250391P.
 PR 05-DEC-2000; 2000US-0251030P.
 PR 05-DEC-2000; 2000US-0251988P.
 PR 05-DEC-2000; 2000US-0256718P.
 PR 06-DEC-2000; 2000US-0251479P.
 PR 08-DEC-2000; 2000US-0251856P.
 PR 08-DEC-2000; 2000US-0251869P.
 PR 08-DEC-2000; 2000US-0251989P.
 PR 08-DEC-2000; 2000US-0251990P.
 PR 11-DEC-2000; 2000US-0254097P.
 PR 05-JAN-2001; 2001US-0259678P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX

PI Rosen CA, Baraeh SC, Ruben SM;
 XX WPI: 2001-451937/48.
 DR N-PSDB; AAL35371.
 XX
 PT Isolated polypeptide for treating, preventing and/ or prognosing
 PT disorders related to the musculoskeletal system including musculoskeletal
 PT cancers and also for testing and detection e.g. diagnosis.
 XX
 PS Claim 11; SEQ ID NO 1736; 781bp + Sequence Listing; English.
 XX
 CC The invention relates to novel genes (AAL34669-AAL37666) and proteins
 CC (ABB03087-ABB04109) associated with the musculoskeletal system useful for
 CC preventing, treating or ameliorating medical conditions e.g. by protein
 CC or gene therapy. The genes are isolated from a range of human tissues
 CC disclosed in the specification. The nucleic acids, proteins, antibodies
 CC and (ant)agonists are useful in the diagnosis, treatment and prevention
 CC of: (a) cancer, e.g. breast and ovarian cancer and other cancers of the
 CC adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver,
 CC lung, or urogenital; (b) immune disorders e.g. Addison's disease,
 CC allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis,
 CC diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid
 CC arthritis and ulcerative colitis; (c) cardiovascular disorders such as
 CC myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g.
 CC cerebral anoxia and epilepsy; and (f) infectious diseases such as viral,
 CC bacterial, fungal and parasitic infections. Note: The sequence data for
 CC this patent did not form part of the printed specification, but was
 CC obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 56 AA;
 QY 1 XQXXVXHI 8
 Db 25 MQIVVGH 32
 XX
 AC ABL13083;
 XX
 DT 26-FEB-2003 (first entry)
 XX
 DE Novel human musculoskeletal system antigen #703.
 XX
 KW Musculoskeletal system antigen; cancer; metastasis; re-vascularisation;
 KW thrombosis; arteriosclerosis; mineral content; cardiovascular condition;
 KW wound; injury; burn; angiogenesis; ulcer; post-operative tissue repair;
 KW limb regeneration; neuronal growth; neurodegenerative disorder;
 KW Alzheimer's disease; Parkinson's disease; AIDS-related complex;
 KW chondrocyte growth; bone regeneration; periodontal regeneration;
 KW tissue transport; bone graft; skin aging; keratinocyte growth; hair loss;
 KW melanocyte growth; cell proliferation; cell growth; organ transplant;
 KW cell differentiation; body height; weight; hair colour; eye colour; skin;
 KW percentage of adipose tissue; pigmentation; cosmetic surgery; metabolism;
 KW biorhythm; circadian rhythm; depression; tendency for violence; pain;
 KW reproductive capability; hormone level; endocrine level; appetite;
 KW libido; memory; stress; storage capability; fat content; lipid content;
 KW protein content; carbohydrate content; vitamin content; cofactor content;
 XX nutritional component.
 XX Homo sapiens.
 OS
 XX US2002147140-A1.
 PN
 XX 10-OCT-2002.
 PD
 XX

PF 17-JAN-2001; 2001US-00764877.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 28-JUN-2000; 2000US-0214886P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 22-AUG-2000; 2000US-0226868P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 08-SEP-2000; 2000US-0231413P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 27-SEP-2000; 2000US-0235834P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236357P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239355P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241809P.
PR 01-NOV-2000; 2000US-0244617P.
PR 17-NOV-2000; 2000US-0249299P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251858P.
PR 08-DEC-2000; 2000US-0251869P.
XX
XX (ROSE/) ROSEN C A.
PA (RUBE/) RUBEN S M.
PA (BARA/) BARASH S C.
PI Rosen CA, Ruben SM, Barash SC;
XX
XX WPI; 2003-128199/12.
DR N-PSDB; ABX58359.
XX
XX
PT Isolated nucleic acid molecules encoding musculoskeletal system
PT associated polypeptides, useful for detecting disorders, e.g. cancer.
XX
XX Claim 11, SEQ ID NO 1736; 321pp; English.
XX
XX The invention describes an isolated nucleic acid molecule comprising a
CC sequence encoding musculoskeletal system associated polypeptides useful
CC for detecting disorders, e.g., cancer or cancer metastases, in animals or
CC humans. The nucleic acid: stimulates re-vascularisation of ischaemic
CC tissues associated with conditions such as thrombosis, arteriosclerosis,
CC and other cardiovascular conditions; treats wounds due to injuries,

CC burns, post-operative tissue repair, and ulcers; stimulates angiogenesis
CC and limb regeneration; stimulates neuronal growth; can treat and prevent
CC neuronal damage occurring in certain disorders or neurodegenerative
CC conditions, such as, Alzheimer's disease, Parkinson's disease, and AIDS-
CC related complex; stimulates chondrocyte growth, thus they can be used to
CC enhance bone and periodontal regeneration and aid in tissue transports or
CC bone grafts; prevents skin aging due to sunburn by stimulating
CC keratinocyte growth; prevents hair loss, since FGF family members
CC activate hair-forming cells and promotes melanocyte growth; stimulates
CC growth and differentiation of hematopoietic cells and bone marrow cells
CC when used in combination with other cytokines; maintains organs before
CC transplantation or for supporting cell culture of primary tissues;
CC induces tissue of mesodermal origin to differentiate in early embryos;
CC increases or decreases the differentiation or proliferation of embryonic
CC stem cells, besides, haematopoietic lineage; modulates mammalian
CC characteristics, such as, body height, weight, hair colour, eye colour,
CC skin, percentage of adipose tissue, pigmentation, size, and shape (e.g.,
CC cosmetic surgery); modulates mammalian metabolism; changes mammal's metal
CC state or physical state by influencing biorthym, circadian rhythms,
CC depression, tendency for violence, tolerance for pain, reproductive
CC capabilities, hormonal or endocrine levels, appetite, libido, memory, or
CC stress; increases or decreases storage capabilities, fat content, lipid,
CC protein, carbohydrate, vitamins, minerals, cofactors or other nutritional
CC components. This is the amino acid sequence of a novel human
CC musculoskeletal system antigen. Note: The sequence data for this patent
CC did not form part of the printed specification, but was obtained in
CC electronic format directly from the US patent office at
CC ftp.segdata.uspro.gov/sequence.html?docid=20020147140
XX
SQ Sequence 56 AA;
Query Match 100.0%; Score 25; DB 6; Length 56;
Best Local Similarity 50.0%; Pred. No. 9.7e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXXXVXHI 8
: : : : :
Db 25 MQIYVGH 32
RESULT 26
ABP75845
ID ABP75845 standard; protein; 60 AA.
XX
AC ABP75845;
XX
DT 10-FEB-2003 (first entry)
XX
XX Human secretory polypeptide SPTM SEQ ID NO 1029.
DE
XX
XX Human; SPTM; autoimmune disorder; inflammatory disorder; AIDS; anaemia;
KM asthma; Crohn's disease; neurological disorder; epilepsy; cancer;
KM Huntington's disease; Alzheimer's disease; Creutzfeldt-Jakob disease;
KM multiple sclerosis; Parkinson's disease; cell proliferative disorder;
KM anti-inflammatory; immunosuppressive; neuroprotective; nootropic;
KM neuroleptic; anticonvulsant; cytostatic; antiparkinsonian; anxiolytic;
KM antipsoriatic; antianemic; anti-HIV; human immunodeficiency virus;
KM secretory polynucleotide; secretory protein.
XX
XX Homo sapiens.
OS
XX
PN WQ20283876-A2.
XX
PD 24-OCT-2002.
XX
XX
FP 27-MAR-2002; 2002WO-US009921.
XX
XX 29-MAR-2001; 2001US-028067P.
PR 29-MAR-2001; 2001US-028068P.
PR 16-MAY-2001; 2001US-0291280P.
PR 17-MAY-2001; 2001US-0291829P.
PR 17-MAY-2001; 2001US-0291849P.
PR 19-JUN-2001; 2001US-0299428P.

XX	PR		20-JUN-2001; 2001US-0299776P.				
XX	PR		20-JUN-2001; 2001US-0300001P.				
XX	PA	(INCYT)	INCYTE GENOMICS INC.				
XX	PI	Daffo A., Jones AL, Tran AB, Dahl CR, Gietzen D, Chinn J;					
XX	PI	Dufour GE, Hillman JL, Yu JY, Tuanon O, Yap PE, Ameshey SR;					
XX	PI	Daugherty SC, Dam TC, Liu TF, Nguyen DA, Kleeefeld Y, Gerstlin EH;					
XX	PI	Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris B;					
XX	PI	Flores V, Matwaha R, Lo A, Lan RY, Urashka ME;					
XX	XX	WPI; 2003-075543/07.					
XX	DR	N-P8DB; ABZ36287.					
XX	FT	New human secretory proteins and polynucleotides, useful for diagnosing,					
XX	PT	treating or preventing autoimmune/inflammatory disorders (e.g. AIDS),					
XX	PT	neurological disorders (e.g. Alzheimer's), or cell proliferations or					
XX	PT	cancers.					
XX	PS	Claim 27; SEQ ID NO 1029; 458bp + Sequence Listing; English.					
XX	CC	The invention relates to a secretory polynucleotide (designated spm)					
XX	CC	comprising any of 567 polynucleotide sequences (ABZ35837-ABZ36403), a					
XX	CC	naturally occurring polynucleotide sequence at least 90 % identical to					
XX	CC	the polynucleotide sequence, a polynucleotide complementary to them or an					
XX	CC	RNA equivalent of them. The polypeptide or polynucleotide are useful for					
XX	CC	treating, preventing or diagnosing a disease or condition associated with					
XX	CC	the expression of functional SPTM. These are particularly useful for					
XX	CC	diagnosing, treating or preventing autoimmune/inflammatory disorders					
XX	CC	(e.g. acquired immunodeficiency syndrome, anaemia, asthma or Crohn's					
XX	CC	diseases), neurological disorders (e.g. epilepsy, Huntington's disease,					
XX	CC	dementia, stroke, Alzheimer's disease, Creutzfeldt-Jakob disease,					
XX	CC	multiple sclerosis, cerebellar palsy, Parkinson's disease, anxiety,					
XX	CC	schizophrenia or amnesia), or cell proliferative disorders (e.g.					
XX	CC	leukaemia, polycythemia vera, or cancers including adenocarcinoma,					
XX	CC	breast, lymphoma, melanoma, myeloma, sarcoma or cancers of the brain,					
XX	CC	breast, cervix or prostate). The present sequence is one of the SPTM					
XX	CC	proteins of the invention (ABP75384-ABP75962). Note: The sequence data					
XX	CC	for this patent did not form part of the printed specification, but was					
XX	CC	obtained in electronic format directly from WIPO at					
XX	CC	ftp.wipo.int/pub/published_pct_sequences					
XX	XX	Sequence 60 AA;					
XX	Qy	Query Match	100.0%; Score 25; DB 6; Length 60;				
XX	Db	Best Local Similarity	50.0%; Pred. No. 1e+03;				
XX		Matches	4; Conservative	4; Mismatches	0; Indels	0; Gaps	0
XX	Oy	1 XQXVYXHI 8	:	:	:	:	:
XX	Db	22 IQFYVVHI 29	:	:	:	:	:
XX	RESULT 27						
XX	ID	AAV11419	standard; protein; 64 AA.				
XX	AC	AAV11419;					
XX	DT	21-JUN-1999	(first entry)				
XX	DE	Human 5' EST secreted protein SEQ ID No 241.					
XX	KW	Human; secreted protein; EST; expressed sequence tag; diagnosis;					
XX	KW	forensic; gene therapy; chromosome mapping; signal peptide;					
XX	KW	upstream regulatory sequence; cytokine activity; cell proliferation;					
XX	KW	differentiation; haematopoiesis regulation; tissue growth regulation;					
XX	KW	reproductive hormone regulation; chemotactic; chemokinetic; haemostatic;					
XX	KW	chromolytic; anti-inflammatory; tumour inhibition.					
XX	OS	Homo sapiens.					
XX	PN	WO9906551-A2.					

[illegible]

PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 XX Ruben SM, Barash SC, Birse CE, Rosen CA;
 XX
 DR WPI: 2001-235357/24.
 DR N-PSDB; AAH34283.
 XX
 PT Nucleic acids encoding 4277 human colon cancer-associated polypeptides,
 PT useful for preventing, diagnosing and/or treating colorectal cancers.
 XX
 PS Claim 11; Page 7193; 9803pp; English.
 XX
 CC AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon
 CC cancer-associated nucleic acid molecules (N) and proteins (P), where the
 CC proteins are collectively known as colon cancer antigens. The colon
 CC cancer antigens have cytostatic activity and can be used in gene therapy
 CC and vaccine production. N and P may be used in the prevention, diagnosis
 CC and treatment of diseases associated with inappropriate P expression. For
 CC example, N and P may be used to treat disorders associated with decreased
 CC expression by rectifying mutations or deletions in a patient's genome
 CC that affect the activity of P by expressing inactive proteins or to
 CC supplement the patient's own production of P. Additionally, N may be used
 CC to produce the colon cancer-associated Ps, by inserting the nucleic acids
 CC into a host cell and culturing the cell to express the proteins. N and P
 CC can be used in the prevention, diagnosis and treatment of colorectal
 CC carcinomas and cancers. AAH37196 to AAH37204 and AAG77789 represent
 CC sequences used in the exemplification of the present invention. N.B.
 CC Pages 666 to 682 and page 7053 of the sequence listing were missing at
 CC time of publication, meaning no sequences are present for SEQ ID NO:1027
 CC to 1052, 7921 and 7922
 XX
 SQ Sequence 65 AA;
 XX
 SQ
 Query Match 100.0%; Score 25; DB 4; Length 65;
 Best Local Similarity 50.0%; Pred. No. 1.1e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XXXXXVXHI 8
 :|::|:|
 Db 7 SQTSLVNH 14
 RESULT 29
 ABP63801
 ID ABP63801 standard; protein; 65 AA.
 XX
 AC ABP63801;
 XX
 DT 04-NOV-2002 (first entry)
 XX
 DE Human ORP171.
 XX
 KW Cytosolic; Cardiant; Anti-allergic; Immunosuppressive; Vascular;
 KW Antiinflammatory; gene therapy; human; ORFX; atherogenic; platelet;
 KW human umbilical vein endothelial cell; HUVEC; atherosclerotic plaque;
 KW cancer; cardiovascular disease; allergy; autoimmune disease;
 KW wound healing; blood coagulation disorder; inflammatory disorder.
 XX
 OS Homo sapiens.
 XX
 PN US2002082206-A1.
 XX
 PD 27-JUN-2002.
 XX
 PE 30-MAY-2001; 2001US-00867550.
 XX
 PR 30-MAY-2000; 2000US-0208427P.
 XX
 PA (LEAC/) LEACH M D.
 PA (MEHR/) MEHRABAN F.
 PA (CONL/) CONLEY P B.
 PA (TOPP/) TOPPER J N.
 PA (LAWD/) LAW D.

XX
 PI Leach MD, Mehraban F, Conley PB, Topper JN, Law D;
 XX
 DR WPI: 2002-626554/67.
 DR N-PSDB; ABQ98364.
 XX
 PT New polypeptide designated ORFX are present in human atherogenic cells
 PT and are useful to prevent and treat ORFX-associated disorders including
 PT cancer, allergy, wound healing or autoimmune, cardiovascular or
 PT inflammatory disease.
 XX
 PS Claim 10; SEQ ID NO 342; 78pp; English.
 XX
 CC The present invention relates to novel human ORFX polypeptides and their
 CC coding sequences (ABP63631-ABP64681 and ABQ98194-ABQ99267). The sequences
 CC were discovered in human atherogenic cells, in particular in platelets
 CC and human umbilical vein endothelial cells (HUVEC) and are expressed in
 CC many other tissues as well. Atherogenic cells are cells which have the
 CC potential to develop atherosclerotic plaques. The ORFX polypeptides and
 CC nucleic acids are useful for treating or preventing a pathological
 CC condition associated with an ORFX-associated disorder, e.g. cancer,
 CC cardiovascular disease, allergy, autoimmune disease, wound healing, blood
 CC coagulation disorders or inflammatory disorders. Note: The sequence data
 CC for this patent did not form part of the printed specification, but was
 CC obtained in electronic format directly from the USPTO web site at
 CC seqdata.uspto.gov/sequence.html?DocID=20020082206
 XX
 SQ Sequence 65 AA;
 XX
 SQ
 Query Match 100.0%; Score 25; DB 5; Length 65;
 Best Local Similarity 50.0%; Pred. No. 1.1e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XXXXXVXHI 8
 :|::|:|
 Db 56 KQKXVGH 63
 RESULT 30
 AAG64900
 ID AAG64900 standard; protein; 81 AA.
 XX
 AC AAG64900;
 XX
 DT 15-OCT-2001 (first entry)
 XX
 DE Human kinesin 9.
 XX
 KW Human; kinesin 9; cancer; haemopathy; HIV infection; inflammation;
 KW immunological disease; gene therapy.
 XX
 OS Homo sapiens.
 XX
 PN WO200155383-A1.
 XX
 PD 02-AUG-2001.
 XX
 PE 21-JAN-2001; 2001WO-CN000090.
 XX
 PR 28-JAN-2000; 2000CN-00111618.
 XX
 PA (BIOD-) BIODOOR GENE TECHNOLOGY LTD SHANGHAI.
 XX
 PI Mao Y, Xie Y;
 XX
 DR WPI: 2001-483249/52.
 DR N-PSDB; AAH48320.
 XX
 PT Human kinesin 9 and encoded polynucleotide, applicable in diagnosis and
 PT treatment of malignant tumor, hemopathy, HIV infection, immunological
 PT diseases and various inflammations.
 XX
 PS Claim 1; Page 25; 29pp; Chinese.

XX The present invention provides the protein and coding sequences of human
 CC kineasin 9. The sequences are useful in the treatment of cancer,
 CC haemopathy, HIV infection, immunological diseases and inflammation. The
 CC present sequence is the protein of the invention
 CC
 SQ Sequence 81 AA;

Query Match 100.0%; Score 25; DB 4; Length 81;
 Best Local Similarity 50.0%; Pred. No. 1.5e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8
 : : : : :
 Db 67 QSSVDH1 74

RESULT 31
 AAU27930
 ID AAU27930 standard; protein; 87 AA.
 XX
 AC AAU27930;
 XX
 DT 18-DEC-2001 (first entry)
 XX
 DE Human contig polypeptide sequence #83.
 XX

XX Mammal; human; rhesus monkey; baker's yeast; fission yeast; Norway rat;
 KM mouse; Chinese hamster; African clawed frog; fruit fly; dog; leukaemia;
 KM cancer; lymphoma; neuroblastoma; autoimmune disorder; cell proliferation;
 KM nervous system disorder; inflammatory disorder; cell differentiation;
 KM angiogenesis; stem cell growth factor; activin; inhibin; cartilage; burn;
 KM genetic disorder; bone regeneration; tendon; ligament; tissue repair;
 KM cytoskeletal; antineoplastic; antiarthritic; vulnary; antiinflammatory;
 KM antibacterial; immunosuppressive; vasotropic; antiparkinsonian;
 KM neuroprotective; osteopathic; antidiabetic; antiaesthetic; antiallergic;
 KM immunostimulant; analgesic; gene therapy.
 KM
 XX
 OS Homo sapiens.
 OS Synthetic.
 OS
 PN WO200164834-A2.
 XX
 PD 07-SEP-2001.

XX 26-FEB-2001; 2001WO-US004926.
 XX
 PF 28-FEB-2000; 2000US-00515126.
 PR 18-MAY-2000; 2000US-00577409.
 PR 17-JUN-2000; 2000US-00597707.
 PR 14-JUL-2000; 2000US-00616807.
 PR 19-SEP-2000; 2000US-00664641.
 XX
 XX

PA (HYSE-) HYSEQ INC.

XX Tang YT, Liu C, Zhou P, Asundi V, Zhang J, Zhao QA, Ren F,
 PI Xue AJ, Yang Y, Wehrman T, Wang J, Ma Y, Wang D, Chen R, Xu C;
 PI Dmanac R;
 XX

DR WPI; 2001-589862/66.
 DR N-PSDB; AAS44830.
 XX

PT Novel polypeptides and nucleic acids obtained from cDNA libraries
 PT prepared from various human tissues, for diagnosis, treatment of cancer,
 PT neurological, inflammatory disorders and for use in arrays for detection.
 XX
 XX Claim 10; Page 134; 153pp; English.

CC Sequences AAU27676-AAU28019 represent full-length polypeptides and contig
 CC polypeptides of the invention. The proteins and their associated DNA
 CC sequences are useful for the treatment, diagnosis and prevention of
 CC various types of disorder in a mammalian subject such as a human, dog,
 CC monkey, mouse, hamster or rat. The disorders include cancers such as

CC leukaemia, lymphoma and neuroblastoma, autoimmune disorders such as
 CC multiple sclerosis, connective tissue disease, rheumatoid arthritis,
 CC diabetes mellitus, allergic rhinitis, asthma and eczema, nervous system
 CC disorders such as Parkinson's disease, Alzheimer's disease, Huntington's
 CC chorea, amyotrophic lateral sclerosis, spinal muscular atrophy and
 CC Wernicke disease, inflammatory disorders such as hepatitis, Crohn's
 CC disease, ischaemia-reperfusion injury, shock, sepsis and inflammatory
 CC bowel disease. The sequences exhibit activity relating to angiogenesis,
 CC cell proliferation, cell differentiation, stem cell growth factor,
 CC activin or inhibin. Therefore, they can be used to manipulate stem cells
 CC in culture to give rise to neuroepithelial cells that can be used to
 CC augment or replace cells damaged by illness, accidental damage or genetic
 CC disorders. The sequences may also be used for regeneration of bone,
 CC cartilage, tendons and ligaments and in tissue repair and burn healing.
 CC Note: Some sequences for this patent did not form part of the printed
 CC specification, but were obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 87 AA;

Query Match 100.0%; Score 25; DB 4; Length 87;
 Best Local Similarity 50.0%; Pred. No. 1.6e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8
 : : : : :
 Db 12 TQVPVXH1 19

RESULT 32
 AAU19327
 ID AAU19327 standard; protein; 87 AA.
 XX
 AC AAU19327;
 XX
 DT 04-DEC-2001 (first entry)
 XX
 DE Human G protein-coupled receptor ngPCR-2253.
 XX
 XX

XX Human; G protein-coupled receptor; ngPCR-X; antiviral; analgesic;
 KM cytoskeletal; cardiant; antidiabetic; anorectic; hypotensive; hypertensive;
 KM antiparkinsonian; nootropic; neuroprotective; antidepressant;
 KM viral infection; HIV-1; human immunodeficiency virus; HIV-2; pain;
 KM cancer; metabolic disease; cardiovascular disease; type 2 diabetes;
 KM obesity; anorexia; hypotension; hypertension; myocardial infarction;
 KM atherosclerosis; Parkinson's disease; psychosis; neurological disorder;
 KM schizophrenia; migraine; major depression; anxiety; mental disorder;
 KM manic depression; dyskinesia; Huntington's disease; Tourette's Syndrome.
 KM
 XX
 OS Homo sapiens.
 OS
 PN WO200166751-A2.
 XX
 PD 13-SEP-2001.

XX 08-MAR-2001; 2001WO-US007370.
 XX
 PF 08-MAR-2000; 2000US-0187563P.
 PR 08-MAR-2000; 2000US-0187584P.
 PR 08-MAR-2000; 2000US-0187637P.
 PR 08-MAR-2000; 2000US-0187639P.
 PR 08-MAR-2000; 2000US-0187640P.
 PR 08-MAR-2000; 2000US-0187707P.
 PR 08-MAR-2000; 2000US-0187708P.
 PR 08-MAR-2000; 2000US-0187709P.
 PR 08-MAR-2000; 2000US-0187827P.
 PR 08-MAR-2000; 2000US-0188292P.
 PR 08-MAR-2000; 2000US-0188293P.
 PR 08-MAR-2000; 2000US-0188293P.
 XX
 XX

PA (PHAA) PHARMACIA & UPJOHN CO.
 XX
 PI Vogel G;

XX WPI; 2001-536779/59.
DR N-PSDB; AAS30899.
XX
PT Isolated nucleic acid molecules encoding G protein-coupled receptors
PT termed nGPCR-x, useful in the treatment and diagnosis of viral
PT infections, cancers and mental disorders (e.g. Parkinson's disease and
PT schizophrenia).
XX
PS Claim 31; Page 238; 292pp; English.
XX
CC The invention relates to novel isolated nucleic acid molecules encoding G
CC protein-coupled receptors termed nGPCR-x. nGPCR-x polynucleotides,
CC polypeptides, and modulators may be used in the treatment of diseases and
CC conditions such as infections, such as viral infections caused by HIV-1
CC (human immunodeficiency virus) or HIV-2, pain, cancers, metabolic and
CC cardiovascular diseases and disorders (e.g., type 2 diabetes, obesity,
CC anorexia, hypotension, hypertension, myocardial infarction,
CC atherosclerosis), Parkinson's disease, and psychotic and neurological
CC disorders, including schizophrenia, migraine, major depression, anxiety,
CC mental disorder, manic depression, and dyskinesias, such as Huntington's
CC disease or Tourette's Syndrome and many other diseases and syndromes
CC listed in the specification. nGPCR-x polynucleotides and polypeptides, as
CC well as nGPCR-x modulators, may also be used in diagnostic assays for
CC such diseases or conditions. The present sequence represents a G protein-
CC coupled receptor of the invention
XX
SQ Sequence 87 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 87;
Best Local Similarity 50.0%; Pred. No. 1.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 XXXXXVXHI 8
Db 21 SQEVRPHI 28
XX
RESULT 33
AAB92655
ID AAB92655 standard; protein; 88 AA.
XX
AC AAB92655;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human protein sequence SEQ ID NO:10999.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy.
XX
OS Homo sapiens.
XX
PN EPI074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or

PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 8; SEQ ID NO 10999; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesizing 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesizing polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 88 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 88;
Best Local Similarity 50.0%; Pred. No. 1.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 XXXXXVXHI 8
Db 63 SQEVRPHI 70
XX
RESULT 34
ABP75406
ID ABP75406 standard; protein; 88 AA.
XX
AC ABP75406;
XX
DT 10-FEB-2003 (first entry)
XX
DE Human secretory polypeptide SPTM SEQ ID NO 590.
XX
KW Human; SPTM; autoimmune disorder; inflammatory disorder; AIDS; anaemia;
KW asthma; Crohn's disease; neurological disorder; epilepsy; cancer;
KW Huntington's disease; Alzheimer's disease; Creutzfeldt-Jakob disease;
KW multiple sclerosis; Parkinson's disease; cell proliferative disorder;
KW anti-inflammatory; immunosuppressive; neuroprotective; nootropic;
KW neuroleptic; anticonvulsant; cyostatic; antiparkinsonian; anxiolytic;
KW antipeptatic; antianemic; anti-HIV; human immunodeficiency virus;
KW secretory polynucleotide; secretory protein.
XX
OS Homo sapiens.
XX
PN WO200283876-A2.
XX
PD 24-OCT-2002.
XX
PF 27-MAR-2002; 2002MO-US009921.
XX
PR 29-MAR-2001; 2001US-0280067P.
PR 29-MAR-2001; 2001US-0280068P.
PR 16-MAY-2001; 2001US-0291280P.
PR 17-MAY-2001; 2001US-0291829P.
PR 17-MAY-2001; 2001US-0291849P.
PR 19-JUN-2001; 2001US-0299428P.
PR 20-JUN-2001; 2001US-0299776P.

PR 20-JUN-2001; 2001US-0300001P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Daffo A, Jones AL, Tran AB, Dahl CR, Gietzen D, Chinn J,
PI Dufour GE, Hillman JL, Yu JY, Tuason O, Yap PE, Ameshey SR,
PI Daugherty SC, Dam TC, Liu TF, Nguyen DA, Kleeefeld Y, Gerstin EH;
PI Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris B,
PI Flores V, Marwaha R, Lo A, Lan RY, Urashka ME;
XX
DR WPI; 2003-075543/07.
DR N-PSDB; ABZ35857.
XX
PT New human secretory proteolins and polynucleotides, useful for diagnosing,
PT treating or preventing autoimmune/inflammatory disorders (e.g. AIDS),
PT neurological disorders (e.g. Alzheimer's), or cell proliferations or
PT cancers.
PS
XX Claim 27; SEQ ID NO 590; 458bp + Sequence Listing; English.
XX
XX The invention relates to a secretory polynucleotide (designated spm)
XX comprising any of 567 polynucleotide sequences (ABZ35837-ABZ36403), a
XX naturally occurring polynucleotide sequence at least 90 % identical to
XX the polynucleotide sequence, a polynucleotide complementary to them or an
XX RNA equivalent of them. The polypeptide or polynucleotide are useful for
XX treating, preventing or diagnosing a disease or condition associated with
XX the expression of functional SPM. These are particularly useful for
XX diagnosing, treating or preventing autoimmune/inflammatory disorders
XX (e.g. acquired immunodeficiency syndrome, anaemia, asthma or Crohn's
XX disease), neurological disorders (e.g. epilepsy, Huntington's disease,
XX dementia, stroke, Alzheimer's disease, Creutzfeldt-Jakob disease,
XX multiple sclerosis, cerebral palsy, Parkinson's disease, anxiety,
XX schizophrenia or amnesia), or cell proliferative disorders (e.g.
XX psoriasis, polycythemia vera, or cancers including adenocarcinoma,
XX leukaemia, lymphoma, melanoma, myeloma, sarcoma or cancers of the brain,
XX breast, cervix or prostate). The present sequence is one of the SPM
XX proteins of the invention (ABP75384-ABP75962). Note: The sequence data
XX for this patent did not form part of the printed specification, but was
XX obtained in electronic format directly from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
SQ
XX Sequence 88 AA;
Query Match 100.0%; Score 25; DB 6; Length 88;
Best Local Similarity 50.0%; Pred. No. 1.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 1 QXXXVXHI 8
Db 61 SQSDVHLHI 68
RESULT 35
AAM93111
ID AAM93111 standard; protein; 91 AA.
XX
AC AAM93111;
XX
DT 05-NOV-2001 (first entry)
XX
DE Human digestive system antigen SEQ ID NO: 2460.
XX
XX Human digestive system antigen; gene therapy; cancer; appendicitis;
XX ulcerative colitis; infection; Hirschsprung's disease; chronic colitis;
XX digestive system disorder; Meckel's diverticulum.
XX
OS Homo sapiens.
XX
PN WO200155314-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001324.

XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209457P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226688P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235835P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.

PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
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PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
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PR 17-NOV-2000; 2000US-0249248P.
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PR 17-NOV-2000; 2000US-0249250P.
PR 17-NOV-2000; 2000US-0249251P.
PR 17-NOV-2000; 2000US-0249252P.
PR 17-NOV-2000; 2000US-0249253P.
PR 17-NOV-2000; 2000US-0249254P.
PR 17-NOV-2000; 2000US-0249255P.
PR 17-NOV-2000; 2000US-0249256P.
PR 17-NOV-2000; 2000US-0249257P.
PR 17-NOV-2000; 2000US-0249258P.
PR 17-NOV-2000; 2000US-0249259P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0251989P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
XX Rosen CA, Barash SC, Ruben SM;
XX
XX WPI; 2001-502630/55.
DR N-PSDB; AAK88884.
XX
XX
PT Polynucleotides encoding digestive system antigens, useful for

PT diagnosing, treating, preventing and/or prognosing disorders of the
PT digestive system, particularly cancer and cancer metastases.
XX
XX
PS Claim 11; SEQ ID NO 2460; 986pp; English.
XX
XX The present invention provides the protein and coding sequences of a
CC number of human digestive system antigens. These can be used in the
CC diagnosis, treatment and prevention of digestive system disorders,
CC including cancer, Meckel's diverticulum, bacterial or parasitic
CC infections, appendicitis, Hirschsprung's disease, chronic colitis or
CC ulcerative colitis. The present sequence is a digestive system antigen of
CC the invention
XX
SQ Sequence 91 AA;

Query Match 100.0%; Score 25; DB 4; Length 91;
Best Local Similarity 50.0%; Pred. No. 1.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
Db 37 VQDTVDHI 44

RESULT 36
AAM38627
ID AAM38627 standard; protein; 91 AA.
XX
AC AAM38627;
XX
DT 19-OCT-2001 (first entry)
XX
DE Human colorectal cancer antigen SEQ ID NO: 142.
XX
KW Human; colorectal cancer; colorectal cancer antigen; gene therapy.
XX
OS Homo sapiens.
XX
PN WO200155350-A1.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001350.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
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PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
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PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
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PR 14-AUG-2000; 2000US-0225758P.

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PR 08-SEP-2000; 2000US-0231242P.
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PR 12-SEP-2000; 2000US-0231968P.
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PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
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PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235834P.
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PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 13-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.

PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249246P.
PR 17-NOV-2000; 2000US-0249255P.
PR 17-NOV-2000; 2000US-0249259P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.

(HUMA-) HUMAN GENOME SCI INC.
XX
PA
XX
Rosen CA, Barash SC, Ruben SM;
PI WPI; 2001.457727/49.
XX
DR N-PSDB; AA157605.
XX
XX
PT Isolated polypeptide for treating, preventing and/or prognosing
PT disorders related to the colon and rectum including colorectal cancers
PT and also for testing and detection e.g. diagnosis.
XX
XX
PS Claim 11; SEQ ID NO 142; 522bp + Sequence Listing; English.
XX
XX
CC The present invention provides the protein and coding sequences of a
CC number of colorectal cancer antigens. These are shown in AA157547-
CC AA157619 and AA157659-AMM38641. These can be used in the diagnosis,
CC prevention and treatment of cancer of the colon and/or rectum. The
CC present sequence is a colorectal cancer antigen of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pcr_sequences
XX
SQ Sequence 91 AA;

Query Match 100.0%; Score 25; DB 4; Length 91;
Best Local Similarity 50.0%; Pred. No. 1.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHI 8
DB 37 VQDTVDHI 44

RESULT 37
ABG97679
ID ABG97679 standard; protein; 91 AA.
XX
AC ABG97679;

XX 18-DEC-2002 (first entry)
DT Human colorectal cancer related protein #59.
XX
DE Human, colorectal cancer related protein; colon; rectum;
XX colorectal cancer metastasis; gastrointestinal disorder; cytostatic.
XX Homo sapiens.
OS
XX US2002119919-A1.
PN
PD 29-AUG-2002.
XX
PF 17-JAN-2001; 2001US-00764855.
XX
PR 31-JAN-2000; 2000US-0179065P.
XX
PA (ROSE/) ROSEN C A.
PA (RUBE/) RUBEN S M.
PA (BARA/) BARASH S C.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2002-731367/79.
DR N-PSDB; ABS99782.
XX
PT New colorectal cancer polypeptide for diagnosing, prognosing, preventing,
PT and treating immune, hyperproliferative, liver, kidney, reproductive
PT disorders and for identifying modulators of therapeutic use.
XX
PS Claim 11; SEQ ID NO 142; 183bp; English.
XX
CC The present invention relates to the isolation of novel human colorectal
CC cancer related proteins, and polynucleotide sequences encoding them. The
CC sequences of the invention are useful in the diagnosis, treatment,
CC prevention and/or prognosis of the colon and/or rectum, including
CC colorectal cancer, colorectal cancer metastases, and gastrointestinal
CC disorders such as dysphagia, peptic oesophagitis, gastric reflux,
CC irritable bowel syndrome, and peritoneal diseases. The invention also
CC describes antibodies that bind colorectal cancer related proteins,
CC vectors, host cells, and recombinant and synthetic methods for producing
CC human colorectal cancer related polynucleotides, polypeptides, and/or
CC antibodies. ABG97621-ABG97693 represent human colorectal cancer related
CC proteins. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from the USPTO web site at seqdata.uspto.gov/peispidbentry.html
XX
SQ Sequence 91 AA;

Query Match 100.0%; Score 25; DB 5; Length 91;
Best Local Similarity 50.0%; Pred. No. 1.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXVXHI 8
: : : : :
Db 37 VQDTVDHI 44

RESULT 38
ADB92935
ID ADB92935 standard; protein; 91 AA.
XX
AC ADB92935;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human colorectal cancer related polypeptide #59.
XX
XX human; colorectal cancer; antigen; gene therapy;
KW gastrointestinal disorder; inflammatory disease; infection; cancer;
KW intestinal neoplasm; small intestine carcinoma; tumour;
KW small intestine non-Hodgkin's lymphoma; small bowel lymphoma; ulcer;

KW peptic ulcer; Bruton's disease; X linked infantile agammaglobulinaemia;
KW severe combined immunodeficiency; DiGeorge anomaly;
KW hyperproliferative disorder; acute lymphoblastic leukaemia;
KW acute lymphocytic leukaemia; urinary system disorder; cortical necrosis;
KW kidney infarction; cardiovascular disorder; carcinoid heart disease;
KW arrhythmia; respiratory disorder; non-allergic rhinitis; sinusitis;
KW musculoskeletal system disorder; Albers-Schönberg disease;
KW Marfan's syndrome; neurological disease; phenylketonuria;
KW Menicke's encephalopathy; Alzheimer's disease; endocrine disorder;
KW Grave's disease; Cushing's syndrome; reproductive system disorder;
KW prostatitis; benign prostatic hypertrophy; benign prostatic hyperplasia;
KW chromosis; atherosclerosis; myocardial infarction; ischaemic attack.
XX
OS Homo sapiens.
XX
XX US2003054420-A1.
PN
PD 20-MAR-2003.
XX
PP 11-FEB-2002; 2002US-00072349.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209457P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226688P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227182P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.

PR 11-APR-2000; 2000FR-00004630.
XX (INRG) INRA INST NAT RECH AGRONOMIQUE.
PA Bolotrine A, Sorokine A, Renault P, Ehrlich SD;
XX WPI; 2002-043418/06.
DR
XX New nucleotide sequence useful in the identification or Lactococcus
PT lactis and related species.
XX
PS Claim 6; SEQ ID NO 2227; 2504bp; French.
XX
CC The present invention is related to a Lactococcus lactis nucleotide
CC sequence (ABR90521) and related proteins (ABR53300-ABR55621). The nucleic
CC acid sequence is useful in the detection and/or amplification of nucleic
CC acid sequence, particularly to identify Lactococcus lactis or related
CC species. The proteins of the invention are useful for the biosynthesis or
CC biodegradation of a composition of interest. The invention helps research
CC in lactic bacteria, particularly useful in the production of yogurt and
CC cheese. Note: The sequence data for this patent is based on equivalent
CC patent WO20017734 (published 18-OCT-2001) which is available in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences. (Updated on 29-AUG-2003 to
CC standardise OS field)
XX
SQ Sequence 92 AA;
XX
Query Match 100.0%; Score 25; DB 5; Length 92;
Best Local Similarity 50.0%; Pred. NO. 1.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 1 XXXXXHHI 8
Db 23 LQRSVGH I 30
XX
RESULT 40
ABR99244
ID ABR99244 standard; protein; 94 AA.
XX
AC ABR99244;
XX
DT 18-DEC-2002 (first entry)
XX
DE Phosphoribosyl glycineamide synthetase 10.34.
XX
KW Phosphoribosyl glycineamide synthetase 10.34; malignant tumour;
KW haemopathy; HIV; immunological disease; inflammation.
XX
OS Unidentified.
XX
PN CN1352247-A.
XX
PD 05-JUN-2002.
XX
PF 06-NOV-2000; 2000CN-00127215.
XX
PR 06-NOV-2000; 2000CN-00127215.
XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2002-667812/72.
DR N-PSDB; ABV72785.
XX
XX New phosphoribosyl glycineamide synthetase 10.34 polypeptide for treating
PT malignant tumors, hemopathy, human immunodeficiency virus infection,
PT immunological diseases and various inflammations.
XX
PS Claim 1; Page 26 (Disclosure); 30pp; Chinese.
XX

CC The invention relates to a novel phosphoribosyl glycineamide synthetase
CC 10.34, and the polynucleotides encoding it. The polypeptide is useful in
CC treating various diseases, such as malignant tumours, haemopathy, human
CC immunodeficiency virus (HIV) infection, immunological diseases and
CC various inflammations. The present invention also discloses the
CC antagonist of the polypeptide, and the application of the polynucleotides
CC The present sequence represents the phosphoribosyl glycineamide synthetase
CC 10.34 of the invention
XX
SQ Sequence 94 AA;
XX
Query Match 100.0%; Score 25; DB 5; Length 94;
Best Local Similarity 50.0%; Pred. NO. 1.8e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 1 XXXXXHHI 8
Db 61 IQIUVHI 68
XX
RESULT 41
AAG34448
ID AAG34448 standard; protein; 96 AA.
XX
AC AAG34448;
XX
DT 18-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 41916.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
XX 25-FEB-1999; 99US-0121825P.
XX 05-MAR-1999; 99US-0123180P.
XX 09-MAR-1999; 99US-0123548P.
XX 23-MAR-1999; 99US-0125788P.
XX 25-MAR-1999; 99US-0126264P.
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XX 23-APR-1999; 99US-0130891P.
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XX 30-APR-1999; 99US-0132407P.
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XX 14-MAY-1999; 99US-0134370P.
XX 18-MAY-1999; 99US-0134376P.
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XX 20-MAY-1999; 99US-0135124P.
XX 21-MAY-1999; 99US-0135353P.

PR 24-MAY-1999; 99US-0135629P
PR 25-MAY-1999; 99US-0136021P
PR 27-MAY-1999; 99US-0136392P
PR 28-MAY-1999; 99US-0136782P
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PR 08-JUN-1999; 99US-0138094P
PR 10-JUN-1999; 99US-0138540P
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PR 14-JUN-1999; 99US-0139113P
PR 16-JUN-1999; 99US-0139452P
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PR 18-JUN-1999; 99US-0139462P
PR 18-JUN-1999; 99US-0139463P
PR 18-JUN-1999; 99US-0139750P
PR 18-JUN-1999; 99US-0139763P
PR 21-JUN-1999; 99US-0139817P
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Qy 1 XXXVXHI 8
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 Db 54 GQSVVHI 61

RESULT 42
 ABB53633
 ID ABB53633 standard; protein; 96 AA.

XX AC ABB53633;

XX 29-AUG-2003 (revised)
 DT 16-MAY-2002 (first entry)

XX DE Lactococcus lactis protein ydCG.

XX KM Biosynthesis; biodegradation; lactic bacterium; yogurt; cheese.

XX OS Lactococcus lactis; IL1403.

XX PN FR2807446-A1.

XX PD 12-OCT-2001.

XX PF 11-APR-2000; 2000FR-00004630.

XX PR 11-APR-2000; 2000FR-00004630.

XX PA (INRG) INRA INST NAT RECH AGRONOMIQUE.

XX PI Bolotine A, Sorokine A, Renault P, Ehrlich SD;

XX DR WPI; 2002-043418/06.

XX PT New nucleotide sequence useful in the identification or Lactococcus
 PT lactis and related species.

XX PS Claim 6; SEQ ID NO 335; 2504pp; French.

XX CC The present invention is related to a Lactococcus lactis nucleotide
 CC sequence (ABA90521) and related proteins (ABB53300-ABB55621). The nucleic
 CC acid sequence is useful in the detection and/or amplification of nucleic
 CC acid sequence, particularly to identify Lactococcus lactis or related
 CC species. The proteins of the invention are useful for the biosynthesis or
 CC biodegradation of a composition of interest. The invention helps research
 CC in lactic bacteria, particularly useful in the production of yogurt and
 CC cheese. Note: The sequence data for this patent is based on equivalent
 CC patent WO20017734 (published 18-OCT-2001) which is available in
 CC electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences. (Updated on 29-AUG-2003 to
 CC standardise OS field)

XX SQ Sequence 96 AA;

Query Match 100.0%; Score 25; DB 5; Length 96;
 Best Local Similarity 50.0%; Pred. No. 1.8e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QXXXVXHI 8
 :|::|::|
 Db 15 SQEDVXHI 22

RESULT 43
 AAG02708

ID AAG02708 standard; protein; 100 AA.

XX AC AAG02708;

XX DT 06-OCT-2000 (first entry)

XX DE Human secreted protein, SEQ ID NO: 6789.

XX KM Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
 KW gene therapy; chromosome mapping.

XX OS Homo sapiens.

XX PN EP1033401-A2.

XX PD 06-SEP-2000.

XX PF 21-FEB-2000; 2000EP-00200610.

XX PR 26-FEB-1999; 99US-0122487P.

XX PA (GEST) GENSET.

XX PI Dumas Milne Edwards J, Duclert A, Giordano J;

XX DR WPI; 2000-500381/45.

XX DR N-PSDB; AAC02714.

XX PT New nucleic acid that is a 5' expressed sequence tag (5' EST) for
 PT obtaining cDNAs and genomic DNAs that correspond to 5' ESTs and for
 PT diagnostic, forensic, gene therapy and chromosome mapping procedures.

XX PS Claim 13; SEQ ID NO 6789; 71pp + Sequence Listing; English.

XX CC The present sequence is a polypeptide encoded by one of a large number of
 CC 5' ESTs derived from mRNAs encoding secreted proteins. The 5' ESTs were
 CC prepared from total human RNAs or polyA+ RNAs derived from 30 different
 CC tissues. EST sequences usually correspond mainly to the 3' untranslated
 CC region (UTR) of the mRNA because they are often obtained from oligo-dT
 CC primed cDNA libraries. Such ESTs are not well suited for isolating cDNA
 CC sequences derived from the 5' ends of mRNAs and even in those cases where
 CC longer cDNA sequences have been obtained, the full 5' UTR is rarely
 CC included. 5' ESTs are derived from mRNAs with intact 5' ends and can
 CC therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs
 CC are also used in diagnostic, forensic, gene therapy and chromosome
 CC mapping procedures. They are used to obtain upstream regulatory sequences
 CC and to design expression and secretion vectors

XX SQ Sequence 100 AA;

Query Match 100.0%; Score 25; DB 3; Length 100;
 Best Local Similarity 50.0%; Pred. No. 1.9e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QXXXVXHI 8
 :|::|::|
 Db 90 SQGVVHI 97

RESULT 44

ABR82047
 ID ABR82047 standard; protein; 101 AA.

XX AC ABR82047;

XX DT 22-SEP-2003 (first entry)

XX DE C. elegans AMPK beta 2 amino acid region SEQ ID NO:21.

XX KM AMP kinase beta subunit oligosaccharide binding domain; AMP kinase;
 KW oligosaccharide binding domain; enzyme; antidiabetic; gene therapy;
 KW antiarteriosclerotic; anorectic; cyostatic; diabetes; atherosclerosis;
 KW obesity; cancer.

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XX OS Caenorhabditis elegans.
XX PN WO2003056032-A1.
XX PD 10-JUL-2003.
XX PF 23-DEC-2002; 2002WO-AU001769.
XX PR 21-DEC-2001; 2001AU-00009728.
XX PA (SVIN-) ST VINCENTS INST MEDICAL RES.
XX PI Stapleton D, Kemp BE;
XX PS WPI; 2003-559281/52.
XX DR
XX PT Screening for a compound that modulates the binding of an oligosaccharide
XX PT to a beta subunit of AMP kinase by assessing the ability of the candidate
XX PT compound to modulate binding of the polypeptide to the oligosaccharide.
XX PS Example; Fig 9; 86pp; English.
XX PS The present invention describes a method of screening for a compound that
XX CC modulates the binding of an oligosaccharide to a beta subunit of AMP
XX CC kinase. The method comprises: (1) exposing a candidate compound to an
XX CC oligosaccharide and a polypeptide comprising a beta subunit of AMP
XX CC kinase, or its mutant and/or fragment that binds an oligosaccharide; and
XX CC (2) assessing the ability of the candidate compound to modulate binding
XX CC of the polypeptide to the oligosaccharide. An AMP kinase beta subunit
XX CC oligosaccharide binding domain sequence has antidiabetic, cyostatic,
XX CC antitumoroleptic and anorectic activities, and can be used in gene
XX CC therapy. The method is useful for screening for a compound that modulates
XX CC the binding of an oligosaccharide to a beta subunit of AMP kinase for
XX CC treating or preventing a condition associated with AMP kinase activity
XX CC e.g., diabetes, atherosclerosis, obesity or cancer. The present sequence
XX CC represents a C. elegans AMPK beta 2 region which is given in comparison
XX CC with the rat beta-1 AMP kinase oligosaccharide binding domain amino acid
XX CC sequence in the exemplification of the present invention
XX SQ Sequence 101 AA;
XX
Query Match 100.0%; Score 25; DB 6; Length 101;
Best Local Similarity 50.0%; Pred. No. 1.9e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHI 8
Db 23 AQRVWHI 30
XX
RESULT 45
AA03068
ID AA03068 standard; protein; 107 AA.
XX AC AA03068;
XX DT 06-NOV-2001 (first entry)
XX DE Human polypeptide SEQ ID NO 16960.
XX
XX KW Human; cytokine; cell proliferation; cell differentiation; gene therapy;
XX KW vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
XX KW tissue growth factor; immunomodulatory; cancer; leukaemia;
XX KW nervous system disorders; arthritis; inflammation.
XX OS Homo sapiens.
XX PN WO200164835-A2.
XX PD 07-SEP-2001.
XX PF 26-FEB-2001; 2001WO-US004927.

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XX PR 28-FEB-2000; 2000US-00515126.
XX PR 18-MAY-2000; 2000US-00577409.
XX PA (HYSE-) HYSEQ INC.
XX PI Tang YT, Liu C, Drmanac RT;
XX PR WPI; 2001-514838/56.
XX DR N-PSDB; AA182999.
XX
XX PT Isolated nucleic acids and polypeptides, useful for preventing diagnosing
XX PT and treating e.g. leukemia, inflammation and immune disorders.
XX PS Claim 20; SEQ ID NO 16960; 1399pp + Sequence Listing; English.
XX
XX CC The invention relates to human polynucleotides (AA179941-AA193841) and
XX CC the encoded proteins (AA000010-AA013910) that exhibit activity relating to
XX CC cytokine, cell proliferation or cell differentiation or which may induce
XX CC production of other cytokines in other cell populations. The
XX CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
XX CC peptide therapy. The polypeptides have various cytokine-like activities,
XX CC e.g. stem cell growth factor activity, haematopoiesis regulating
XX CC activity, tissue growth factor activity, immunomodulatory activity and
XX CC activin/inhibin activity and may be useful in the diagnosis and/or
XX CC treatment of cancer, leukaemia, nervous system disorders, arthritis and
XX CC inflammation. Note: The sequence data for this patent did not form part
XX CC of the printed specification, but was obtained in electronic format
XX CC directly from WIPO at ftp.wipo.int/pub/published_pat_sequences
XX SQ Sequence 107 AA;
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Query Match 100.0%; Score 25; DB 4; Length 107;
Best Local Similarity 50.0%; Pred. No. 2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHI 8
Db 52 RQXVWHI 59
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RESULT 46
AA055413
ID AA055413 standard; protein; 113 AA.
XX AC AA055413;
XX DT 18-OCT-2000 (first entry)
XX DE Arabidopsis thaliana protein fragment SEQ ID NO: 71047.
XX
XX KW Protein identification; signal transduction pathway; metabolic pathway;
XX KW hybridisation assay; genetic mapping; gene expression control; promoter;
XX KW termination sequence.
XX OS Arabidopsis thaliana.
XX PN EP1033405-A2.
XX PD 06-SEP-2000.
XX
XX PF 25-FEB-2000; 2000EP-00301439.
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XX PR 25-FEB-1999; 99US-0121825P.
XX PR 05-MAR-1999; 99US-0123180P.
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Best Local Similarity 50.0%; Pred. No. 2.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
Db 100 SQPKVAHI 107

RESULT 47
AAG55412
ID AAG55412 standard; protein; 117 AA.
XX
AC AAG55412;
XX
DT 18-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 71046.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
XX
OS Arabidopsis thaliana.
XX
FN EPI033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-012180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 28-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
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PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135639P.
PR 25-MAY-1999; 99US-0136021P.
PR 28-MAY-1999; 99US-0136322P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139753P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139839P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140635P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 01-JUL-1999; 99US-0142154P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
PR 16-JUL-1999; 99US-0144085P.
PR 16-JUL-1999; 99US-0144086P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144331P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144333P.
PR 19-JUL-1999; 99US-0144334P.
PR 19-JUL-1999; 99US-0144335P.
PR 20-JUL-1999; 99US-0144352P.
PR 20-JUL-1999; 99US-0144632P.
PR 20-JUL-1999; 99US-0144884P.
PR 21-JUL-1999; 99US-0144814P.
PR 21-JUL-1999; 99US-0145086P.
PR 21-JUL-1999; 99US-0145088P.
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PR 22-JUL-1999; 99US-0145085P.
PR 22-JUL-1999; 99US-0145087P.
PR 22-JUL-1999; 99US-0145089P.
PR 22-JUL-1999; 99US-0145192P.
PR 23-JUL-1999; 99US-0145145P.
PR 23-JUL-1999; 99US-0145218P.
PR 23-JUL-1999; 99US-0145224P.
PR 26-JUL-1999; 99US-0145276P.
PR 27-JUL-1999; 99US-0145913P.
PR 27-JUL-1999; 99US-0145918P.
PR 27-JUL-1999; 99US-0145919P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
PR 02-AUG-1999; 99US-0146388P.
PR 02-AUG-1999; 99US-0146389P.
PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 04-AUG-1999; 99US-0147302P.
PR 05-AUG-1999; 99US-0147192P.
PR 05-AUG-1999; 99US-0147260P.
PR 06-AUG-1999; 99US-0147303P.
PR 06-AUG-1999; 99US-0147416P.
PR 09-AUG-1999; 99US-0147493P.
PR 09-AUG-1999; 99US-0147935P.
PR 10-AUG-1999; 99US-0148171P.
PR 11-AUG-1999; 99US-0148319P.
PR 12-AUG-1999; 99US-0148341P.
PR 13-AUG-1999; 99US-0148565P.
PR 13-AUG-1999; 99US-0148684P.
PR 16-AUG-1999; 99US-0149368P.
PR 17-AUG-1999; 99US-0149175P.
PR 18-AUG-1999; 99US-0149426P.
PR 20-AUG-1999; 99US-0149722P.
PR 20-AUG-1999; 99US-0149723P.
PR 20-AUG-1999; 99US-0149928P.
PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151068P.
PR 27-AUG-1999; 99US-0151069P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
PR 20-SEP-1999; 99US-0154779P.
PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156458P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
PR 05-OCT-1999; 99US-0157753P.
PR 06-OCT-1999; 99US-0157865P.
PR 07-OCT-1999; 99US-0158029P.
PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
PR 13-OCT-1999; 99US-0159294P.
PR 13-OCT-1999; 99US-0159295P.
PR 14-OCT-1999; 99US-0159329P.
PR 14-OCT-1999; 99US-0159330P.
PR 14-OCT-1999; 99US-0159331P.
PR 14-OCT-1999; 99US-0159637P.
PR 14-OCT-1999; 99US-0159638P.
PR 18-OCT-1999; 99US-0159584P.
PR 21-OCT-1999; 99US-0160741P.
PR 21-OCT-1999; 99US-0160767P.

PR 21-OCT-1999; 99US-0160768P.
PR 21-OCT-1999; 99US-0160770P.
PR 21-OCT-1999; 99US-0160814P.
PR 21-OCT-1999; 99US-0160815P.
PR 22-OCT-1999; 99US-0160980P.
PR 22-OCT-1999; 99US-0160981P.
PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 117;
Best Local Similarity 50.0%; Pred. No. 2.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHI 8
Db 104 SQFRVXHI 111

RESULT 48
ABB89102
ID ABB89102 standard; protein; 117 AA.
XX
XX ABB89102;
XX
XX 24-MAY-2002 (first entry)
DT
XX
DE Human polypeptide SEQ ID NO 1478.
XX
XX
XX Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
XX antiallergic; hepatotropic; antidiabetic; antiinflammatory; antitumor;
XX vulnery; anticonvulsant; antibacterial; antifungal; antiparasitic;
XX cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
XX neurological disease; infection; human; secreted protein.
XX
OS Homo sapiens.
XX
XX W0200190304-A2.
XX
XX 29-NOV-2001.
XX
XX 18-MAY-2001; 2001WO-US016450.
XX
XX 19-MAY-2000; 2000US-0205515P.
XX
XX (HUMA-) HUMAN GENOME SCT INC.
XX
XX Birse CE, Rosen CA;
PI
XX WPI: 2002-1122018/16.
XX
XX N-PSDB; ABL89511.
XX
XX Novel 1405 isolated polypeptides, useful for diagnosis, treatment and
XX prevention of neural, immune system, muscular, reproductive,
XX gastrointestinal, pulmonary, cardiovascular, renal and proliferative
XX disorders.
XX
XX Claim 11; SEQ ID NO 1478; 2081pp + Sequence Listing; English.
XX
XX The invention relates to novel genes (ABL89449-ABU90853) and proteins
XX (ABB89040-ABB90444) useful for preventing, treating or ameliorating
XX medical conditions e.g. by protein or gene therapy. The genes are
XX isolated from a range of human tissues disclosed in the specification.
XX The nucleic acids, proteins, antibodies and (ant)agonists are useful in
XX the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and

ovarian cancer and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f) infectious diseases such as viral, bacterial, fungal and parasitic infections. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 117 AA:

Query Match 100.0%; Score 25; DB 5; Length 117;
Best Local Similarity 50.0%; Pred. No. 2.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
Db 24 EQGLVSHI 31

RESULT 49
ABP05752
ID ABP05752 standard; protein, 119 AA.
XX
AC ABP05752;
XX
DT 24-JUN-2002 (first entry)
XX
DE Human ORFX protein sequence SEQ ID NO:11486.
XX
XX Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis; hyperproliferative disorder; psoriasis; benign tumour; haemorrhage; degenerative disorder; osteoarthritis; neurodegenerative disorder; cardiovascular disease; diabetes mellitus; systemic lupus erythematosus; hypertension; hypothyroidism; cholesterol ester storage disease; immune deficiency; immune disorder; infectious disease; autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis; myasthenia gravis.
XX
OS Homo sapiens.
XX
PN WO200192523-A2.
XX
PD 06-DEC-2001.
XX
PF 29-MAY-2001; 2001WO-US010836.
XX
PR 30-MAY-2000; 2000US-0206132P.
PR 29-AUG-2000; 2000US-0228716P.
XX
XX (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach MD;
XX
XX WPI; 2002-106308/14.
DR N-PSDB; ABN21504.
XX
XX Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and autoimmune disorders.
XX
PS Disclosure; SEQ ID NO 11486; 1037bp; English.
XX
XX The present invention describes substantially purified human proteins (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1 in the specification). ABN15762 to ABN27252 encode the human ORFX proteins given in ABP00010 to ABP11500. ORFX proteins are useful for treating or preventing a pathology associated with an ORFX-associated disorder in humans, and in the manufacture of a medicament for treating a syndrome associated with ORFX-associated disorder. ORFX polynucleotide

sequences can be used in gene therapy. ORFX sequences can be used in the treatment of cancer, hyperproliferative disorders, cirrhosis of liver, psoriasis, benign tumours, keloid, degenerative disorders, haemorrhage, osteoarthritis, neurodegenerative disorders, disorders related to organ transplantation, cardiovascular diseases, diabetes mellitus, systemic lupus erythematosus, hypertension, hypothyroidism, cholesterol ester storage disease, various immune deficiencies and disorders, infectious diseases, autoimmune disorders such as multiple sclerosis, rheumatoid arthritis, autoimmune thyroiditis, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. ORFX proteins are also useful for treating burns, incisions, ulcers, for treating osteoporosis, bone degenerative disorders, or periodontal disease, and for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues and conditions resulting from systemic cytokine damage. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 119 AA:

Query Match 100.0%; Score 25; DB 5; Length 119;
Best Local Similarity 50.0%; Pred. No. 2.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
Db 34 TQFVHDHI 41

RESULT 50
ADA33447
ID ADA33447 standard; protein, 121 AA.
XX
AC ADA33447;
XX
DT 20-NOV-2003 (first entry)
XX
DE Acinetobacter baumannii protein #608.
XX
KW Acinetobacter baumannii; bacterial disease; antibacterial; vaccine; plant biocontrol agent.
XX
OS Acinetobacter baumannii.
XX
PN US6562958-B1.
XX
PD 13-MAY-2003.
XX
PF 04-JUN-1999; 99US-00328352.
XX
PR 09-JUN-1998; 98US-0088701P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX
PI Breton G, Bush D;
XX
XX WPI; 2003-576092/54.
DR N-PSDB; ADA29321.
XX
XX New Acinetobacter baumannii proteins and nucleic acids, useful as reagents for diagnosing a bacterial disease, as components of antibacterial vaccines, as targets for antibacterial drugs, to detect the presence of A. baumannii and other Acinetobacter species in a sample, in screening compounds for the ability to interfere with the A. baumannii life cycle or to inhibit A. baumannii infection, and as biocontrol agents for

CC plants. The present sequence represents the amino acid sequence of an A.
CC baumannii protein.

XX Sequence 121 AA;

Query Match 100.0%; Score 25; DB 6; Length 121;
Best Local Similarity 50.0%; Pred. No. 2.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XXXVXXHI 8
:|::|:
Db 19 AQLIVRHI 26

RESULT 51
ABU00139
ID ABU00139 standard; protein; 126 AA.

XX AC ABU00139;

XX DT 17-JAN-2003 (first entry)

XX DE Human novel polypeptide #232.

XX KW Human; genetic disorder; gene mapping; medical imaging; cancer;
KW neurodegenerative disorder; lymphoid cell disorder; osteoporosis;
KW Parkinson's disease; Alzheimer's disease; bone degenerative disorder;
KW osteoarthritis; periodontal disease; liver fibrosis; viral infection;
KW fungal infection; bacterial infection; autoimmune disease; diabetes;
KW atopic dermatitis.

XX KW Homo sapiens.

XX OS WO200274961-A1.

XX PN 26-SEP-2002.

XX PF 14-MAR-2002; 2002WO-US005109.

XX PR 15-MAR-2001; 2001US-00810173.

XX PA (HYSEQ-) HYSEQ INC.

XX PI Tang YT, Zhou P, Goodrich R, Asundi V, Zhang J, Zhao QH, Ren F;
PI Xue AJ, Yang Y, Ma Y, Yamazaki V, Chen R, Wang Z, Ghosh M;
PI Wehrman T, Wang J, Wang D, Drmanac RR;

XX WPI; 2003-040556/03.

XX DR N-PSDB; ABX05217.

XX PT New isolated polypeptides and polynucleotides, useful for preventing,
PT treating or ameliorating medical conditions, such as cancer,
PT neurodegenerative disorders, lymphoid cell disorders, bone degenerative
PT disorders, and infections.

XX PS Claim 9; SEQ ID NO 758; 235bp; English.

XX CC The invention relates to human polynucleotides and the polypeptides they
CC encode. The polynucleotides and polypeptides are useful in diagnostics,
CC forensics, gene mapping, medical imaging, identification of mutations
CC responsible for genetic disorders or other traits, assessing biodiversity
CC and producing many other types of data and products dependent on DNA and
CC amino acid sequences. They are also useful for preventing, treating or
CC ameliorating medical conditions, such as cancer, neurodegenerative
CC disorders (e.g. Parkinson's disease, Alzheimer's disease), lymphoid cell
CC disorders, osteoporosis, osteoarthritis, bone degenerative disorders,
CC periodontal disease, liver fibrosis, infections (e.g. viral, fungal or
CC bacterial) or autoimmune diseases (e.g. diabetes, atopic dermatitis).
CC Sequences ABG9988-ABG9989 and ABU0010-ABU00433 represent human
CC polypeptides of the invention. Note: The sequence data for this patent is
CC not represented in the printed specification but is based on sequence
CC information supplied by the European Patent Office

SQ Sequence 126 AA;

Query Match 100.0%; Score 25; DB 6; Length 126;
Best Local Similarity 50.0%; Pred. No. 2.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XXXVXXHI 8
:|::|:
Db 21 LQITVGH I 28

RESULT 52
AA08249
ID AA08249 standard; protein; 129 AA.

XX AC AA08249;

XX DT 14-JUL-1999 (first entry)

XX DE Human cadherin-D protein fragment.

XX KW Cadherin-1; cadherin-2; cadherin-3; cadherin-4; cadherin-5; cell; CGP;
KW cadherin-6; cadherin-8; cadherin-B; cadherin-C; cadherin-D; antiulcer;
KW cadherin-F; human; cadherin-derived growth factor; differentiation;
KW proliferation; protective; antidiabetic; antitumour; antiinflammatory;
KW antitumour; wound healing; antiosteoporotic; cytoprotective; treatment;
KW intracellular calcium release; MAP-kinase expression; degenerative; bone;
KW metabolic; disease; osteoporosis; osteomalacia; osteopenia; pancreas;
KW diabetes mellitus; muscle; dystrophy; vasculature; central; peripheral;
KW nervous system; neuropathy; lung; bronchial asthma; stomach; ulcer;
KW inflammation; tumour.

XX KW Homo sapiens.

XX OS WO9919477-A1.

XX PN 22-APR-1999.

XX PF 15-OCT-1998; 98WO-EP006547.

XX PR 15-OCT-1997; 97DE-01045284.

XX PR 25-MAR-1998; 98DE-01013088.

XX PA (FORS/) FORSMANN W.

XX PI Forssmann W, Staendker L, Meyer M, Mostafavi H, Oplitz H, Kling L,
PI WPI; 1999-277639/23.

XX DR Cadherin-derived growth factor peptides.

XX PS Claim 7; Page 41; 52pp; German.

XX CC This invention describes novel cadherin-derived growth factor (CDGF)
CC peptides (AA08237-Y08250) which correspond to a (partial) sequence of a
CC pre-pro-cadherin consisting of the domains such as the signal sequence,
CC pro-sequence, cadherin repeats, transmembrane region and intracellular
CC region, with the peptide containing the pro-sequence but lacking at least
CC one of the other domains of the pre-pro-cadherin. The peptides of the
CC invention have cell proliferative, protective differentiation activities,
CC antidiabetic, antitumour, antitumour, antiinflammatory, antitumour,
CC wound healing, antiosteoporotic, cytoprotective activities and stimulate
CC release of intracellular calcium which in turn induces expression of MAP-
CC kinase. The peptides their variants, compounds that contain them, nucleic
CC acid encoding them, their specific antibodies, antagonists and inhibitors
CC are all useful for treatment and prevention of degenerative and metabolic
CC diseases of bone (osteoporosis, osteomalacia and osteopenia), pancreas
CC (diabetes mellitus), muscle (dystrophy), vasculature, central and
CC peripheral nervous systems (neuropathy), lung (bronchial asthma), stomach
CC (ulcers), also of inflammation, aberrant inflammatory responses, tumours,
CC and in healing of wounds and bone. This sequence represents a cadherin-D
CC (also known as cadherin-13) protein fragment

SQ Sequence 129 AA;

Query Match 100.0%; Score 25; DB 2; Length 129;

Best Local Similarity 50.0%; Pred. No. 2.5e+03; Mismatches 4; Conservative 4; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8
 :|:|:|:
 9 FQKVFH1 16

RESULT 53

AAG82581 ID AAG82581 standard; protein; 134 AA.

AC AAG82581;

DT 03-SEP-2001 (first entry)

DE S. epidermidis open reading frame protein sequence SEQ ID NO:2256.

KM Staphylococcus epidermidis SRI strain; infection; diagnosis; vaccination; endocarditis.

OS Staphylococcus epidermidis.

XX MO200134809-A2.

XX 17-MAY-2001.

XX 09-NOV-2000; 2000WO-US030782.

XX 09-NOV-1999; 99US-0164258P.

XX (GLAXO) GLAXO GROUP LTD.

XX Kimerly WJ;

XX WPI: 2001-316495/33.

XX N-PSDB; AAH53431.

XX Nucleic acids encoding polypeptides from Staphylococcus epidermidis, useful for vaccinating against infections, e.g. endocarditis.

XX Claim 18; Page 602; 2188pp; English.

CC AAH53970 represent nucleic acid (I) encoding polypeptides (II), given in AAG81454 to AAG81120, from Staphylococcus epidermidis. (I) and (II) can have antibacterial activity and therefore can be used in vaccination. The nucleic acid (I) may be used to produce the S. epidermidis polypeptides (II) via the production of vectors containing them which are used to produce hosts cells which express the polypeptides. The polypeptides (II) (and/or nucleic acids) may then be used to vaccinate subjects and to raise antibodies against the bacteria. CC The polypeptides may also be used to assay for other inhibitors of their activity and therefore identify compounds that may be used for the treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to CC AAH5090 represent specifically claimed S. epidermidis genomic DNA CC polynucleotide sequences from the present invention. AAH5091 to AAH5098 CC represent oligonucleotide sequences and primers which are used in the CC exemplification of the present invention. N.B. The present invention CC specifically claims all the polynucleotide sequences given in the CC sequence listing of the present specification, however the sequence CC listing only goes up to SEQ ID NO:4454 so even though sequences are given CC in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present CC for SEQ ID NO:4455 to 4464

XX Sequence 134 AA;

Query Match 100.0%; Score 25; DB 4; Length 134;

Best Local Similarity 50.0%; Pred. No. 2.7e+03; Mismatches 4; Conservative 4; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8
 :|:|:|:
 75 AQYAVDH1 82

RESULT 54

ABP80506 ID ABP80506 standard; protein; 136 AA.

AC ABP80506;

DT 07-MAR-2003 (first entry)

DE N. gonorrhoeae amino acid sequence SEQ ID 7542.

KM Antibacterial; infection; vaccine; gene therapy.

XX Neisseria gonorrhoeae.

XX MO200279243-A2.

XX 10-OCT-2002.

XX 12-FEB-2002; 2002WO-1B002069.

XX 12-FEB-2001; 2001GB-00003424.

XX (CHIR-) CHIRON SPA.

XX Fontana MR, Pizsa M, Maignani V, Monaci E;

XX WPI: 2003-058415/05.

XX N-PSDB; ABZ41476.

XX New protein from Neisseria gonorrhoeae, useful for the manufacture of a medicament for treating or preventing N. gonorrhoeae infection.

XX Disclosure; Page 737; 815pp; English.

CC The present invention relates to proteins from Neisseria gonorrhoeae. CC Also disclosed are the nucleic acid molecules encoding the proteins and CC antibodies that specifically bind to the proteins. The composition CC comprising the protein, nucleic acid or antibody is useful for the CC manufacture of a medicament for treating or preventing N. gonorrhoeae CC infection, this may be in the form of a vaccine or gene therapy. CC Sequences given in records ABP76736-ABP81046 represent nucleic acid CC molecules of the invention

XX Sequence 136 AA;

QY 1 XQXXVXH1 8
 :|:|:|:
 111 SQWVYH1 118

Db 111 SQWVYH1 118

RESULT 55

AAB41164 ID AAB41164 standard; protein; 143 AA.

AC AAB41164;

DT 08-FEB-2001 (first entry)

DE Human ORF928 polypeptide sequence SEQ ID NO:1856.

XX Human; open reading frame; ORF; detection; cytostatic; hepatotropic;
 XX vulnary; antipsoptic; antiparkinsonian; nootropic; neuroprotective;
 XX anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
 XX immunostimulant; thymolytic; coagulant; vasotrophic; antidiabetic;

KM hypotensive; dermatological; immunosuppressive; antiinflammatory;
 KM antiviral; antibacterial; antifungal; antithematic; antithyroid;
 KM antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
 KM neurodegenerative disorder; osteoarthritis; graft vs host disease;
 KM cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
 KM cholesterol ester storage; systemic lupus erythematosus; infection;
 KM severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
 KM allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
 KM bone damage; cartilage damage; antiinflammatory disease; coagulation;
 KM thrombosis; contraceptive.
 XX
 OS Homo sapiens.
 XX
 PN W0200058473-A2.
 XX
 PD 05-OCT-2000.
 XX
 PF 31-MAR-2000; 2000WO-US008621.
 XX
 PR 31-MAR-1999; 99US-0127607P.
 PR 02-APR-1999; 99US-0127636P.
 PR 05-APR-1999; 99US-0127728P.
 PR 30-MAR-2000; 2000US-00540763.
 XX
 PA (CURA-) CURAGEN CORP.
 PI Shinkets RA, Leach M;
 XX
 DR WPI; 2000-602362/57.
 DR N-PSDB; AAC75373.
 XX
 PT Novel nucleic acids and peptides derived from open reading frame X,
 PT useful for treating e.g. cancers, proliferative disorders,
 PT neurodegenerative disorders and cardiovascular disease.
 XX
 PS Claim 11; Page 1433; 5507pp; English.
 XX
 CC AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
 CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
 CC sequences have activities such as: cytostatic; hepatotropic; vulnary;
 CC antiporiatic; antiparkinsonian; nootropic; neuroprotective; osteopathic;
 CC anticonvulsant; antilathritic; immunosuppressant; immunostimulant;
 CC cardiant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
 CC dermatological; immunosuppressive; antiinflammatory; antibacterial;
 CC antiviral; antifungal; antithematic; antithyroid; and antianaemic. The
 CC sequences can be used for determining the presence of or predisposition
 CC to or preventing or treating pathological conditions associated with an
 CC ORFX-associated disorder. The nucleic acids can be used to express ORFX
 CC proteins in gene therapy vectors. The proteins and nucleic acids may be
 CC used to treat cancers, proliferative disorders, neurodegenerative
 CC disorders, osteoarthritis, graft vs host disease, cardiovascular disease,
 CC diabetes mellitus, hypertension, hypothyroidism, cholesterol ester
 CC storage, systemic lupus erythematosus, severe combined immunodeficiency
 CC (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune
 CC disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and
 CC cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to
 CC enhance coagulation; to inhibit thrombosis; and as a contraceptive
 XX
 SQ Sequence 143 AA;
 QY Query Match 100.0%; Score 25; DB 3; Length 143;
 Db Best Local Similarity 50.0%; Pred. No. 2.9e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 1 XQXXVXHI 8
 130 MORTVCHI 137
 RESULT 56
 ABP79474
 ID ABP79474 standard; protein; 148 AA.
 XX

AC ABP79474;
 XX
 DT 07-MAR-2003 (first entry)
 XX
 DE N. gonorrhoeae amino acid sequence SEQ ID 5478.
 XX
 KM Antibacterial; infection; vaccine; gene therapy.
 XX
 OS Neisseria gonorrhoeae.
 XX
 PN W0200279243-A2.
 XX
 PD 10-OCT-2002.
 XX
 PF 12-FEB-2002; 2002WO-IB002069.
 XX
 PR 12-FEB-2001; 2001GB-00003424.
 XX
 PA (CHIR-) CHIRON SPA.
 XX
 PI Fontana MR, Pizsa M, Maignani V, Monaci B;
 XX
 DR WPI; 2003-058415/05.
 DR N-PSDB; ABZ40444.
 XX
 PT New protein from Neisseria gonorrhoeae, useful for the manufacture of a
 PT medicament for treating or preventing N. gonorrhoeae infection.
 XX
 PS Disclosure; Page 588; 815pp; English.
 XX
 CC The present invention relates to proteins from Neisseria gonorrhoeae.
 CC Also disclosed are the nucleic acid molecules encoding the proteins and
 CC antibodies that specifically bind to the proteins. The composition
 CC comprising the protein, nucleic acid or antibody is useful for the
 CC manufacture of a medicament for treating or preventing N. gonorrhoeae
 CC infection, this may be in the form of a vaccine or gene therapy.
 CC Sequences given in record ABP76736-ABP81046 represent nucleic acid
 CC molecules of the invention
 XX
 SQ Sequence 148 AA;
 QY Query Match 100.0%; Score 25; DB 6; Length 148;
 Db Best Local Similarity 50.0%; Pred. No. 3e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 1 XQXXVXHI 8
 2 FQTFVQHI 9
 RESULT 57
 ABB68804
 ID ABB68804 standard; protein; 151 AA.
 XX
 AC ABB68804;
 XX
 DT 26-MAR-2002 (first entry)
 XX
 DE Drosophila melanogaster polypeptide SEQ ID NO 33204.
 XX
 KM Drosophila; developmental biology; cell signalling; insecticide;
 KM pharmaceutical.
 XX
 OS Drosophila melanogaster.
 XX
 PN W0200171042-A2.
 PD 27-SEP-2001.
 XX
 PF 23-MAR-2001; 2001WO-US009231.
 XX
 PR 23-MAR-2000; 2000US-0191637P.
 PR 11-JUL-2000; 2000US-00614150.
 XX

XX (PEME) PE CORP NY.
 PA Venter JC, Adams M, Li PWD, Myers EW;
 PI WPI; 2001-656860/75.
 DR N-PSDB; ABL12907.
 XX
 PT New isolated nucleic acid detection reagent for detecting 1000 or more
 PT genes from Drosophila and for elucidating cell signaling and cell-cell
 PT interactions.
 PS Disclosure: SEQ ID NO 33204; 21pp + Sequence Listing; English.
 XX
 CC The invention relates to an isolated nucleic acid detection reagent
 CC capable of detecting 1000 or more genes from Drosophila. The invention is
 CC useful in developmental biology and in elucidating cell signaling and
 CC cell-cell interactions in higher eukaryotes for the development of
 CC insecticides, therapeutics and pharmaceutical drugs. The invention
 CC discloses genomic DNA sequences (ABL16176-ABL130511), expressed DNA
 CC sequences (ABL01840-ABL16175) and the encoded proteins (AB57737-
 CC AB572072). The sequence data for this patent did not form part of the
 CC printed specification, but was obtained in electronic format directly
 CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 151 AA;

Query Match 100.0%; Score 25; DB 4; Length 151;
 Best Local Similarity 50.0%; Pred. No. 3.1e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXNH 8
 :|::|::|
 Db 63 DQETVSHI 70

RESULT 58
 ABB08007 ID ABB08007 standard; protein; 151 AA.
 AC ABB08007;
 XX
 DT 27-AUG-2002 (first entry)
 XX
 DE Human lipid metabolism enzyme (LME)-7 (Id: 7484022CD1).
 XX
 KW Human; lipid metabolism enzyme; LME; cytosolic; neuroprotective;
 KW noctropic; cerebroprotective; antiparkinsonian; antialzheimer's; vaccine;
 KW antileukemic; antimicrobial; anti-AIDS; cardiovascular; antiangiinal;
 KW gene therapy; protein therapy; enzyme.
 XX
 OS Homo sapiens.
 XX
 PN WO200229036-A2.
 XX
 PD 11-APR-2002.
 XX
 PF 05-OCT-2001; 2001WO-US031302.
 XX
 PR 06-OCT-2000; 2000US-0238388P.
 PR 13-OCT-2000; 2000US-0240616P.
 PR 02-NOV-2000; 2000US-0245719P.
 PR 08-NOV-2000; 2000US-0247503P.
 PR 17-NOV-2000; 2000US-0249503P.
 XX
 PA (INCYTE GENOMICS INC.
 XX
 PI Harland L, Arvizu C, Das D, Griffin JA, Baughn MR, Ding L;
 PI Walla NK, Yeo NG, Lu Y, Elliott VS, Thangavelu K, Ramkumar J;
 PI Lal PG, Trilouley CM;
 XX
 DR WPI; 2002-315862/35.
 DR N-PSDB; ABL60543.

XX Lipid Metabolism Enzymes and nucleic acids, useful for preventing,
 PT diagnosing and treating e.g. cancer, Alzheimer's disease and Creutzfeld-
 PT Jakob disease.
 XX
 PS Claim 1; Page 119; 127pp; English.
 XX
 CC The invention relates to human lipid metabolism enzymes (LMEs) and
 CC recombinant polynucleotides. The LMEs can be expressed by standard
 CC recombinant technology. The LME polypeptides, polynucleotides and
 CC modulators may be used in the prevention, diagnosis and treatment of
 CC diseases associated with inappropriate LME expression such as cancer
 CC (e.g. myeloma, sarcoma and breast cancer), neurological disorders (e.g.
 CC Parkinson's, Alzheimer's and multiple sclerosis), microbial infections
 CC (e.g. Creutzfeld-Jakob disease and Acquired Immune deficiency syndrome
 CC (AIDS)) and/or cardiovascular disorders (e.g. cardiomyopathy, angina
 CC pectoris and mitral valve prolapse). The present sequence represents the
 CC human LME-7 polypeptide
 CC
 SQ Sequence 151 AA;

Query Match 100.0%; Score 25; DB 5; Length 151;
 Best Local Similarity 50.0%; Pred. No. 3.1e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXNH 8
 :|::|::|
 Db 25 FQRRVXNH 32

RESULT 59
 AAG63223 ID AAG63223 standard; protein; 152 AA.
 AC AAG63223;
 XX
 DT 01-OCT-2001 (first entry)
 XX
 DE Amino acid sequence of a human lipid metabolism enzyme.

XX
 KW Human; lipid metabolism enzyme; LME; cancer; neurological disorder;
 KW autoimmune disorder; inflammatory disorder; gastrointestinal disorder;
 KW cardiovascular disorder; motor neuron disorder; multiple sclerosis;
 KW demyelinating disease; developmental disorder; gene therapy.
 XX
 OS Homo sapiens.

XX
 FH Key Location/Qualifiers
 FH Peptide 1..21
 FT Modified-site 34 /note= "signal peptide"
 FT Modified-site 61 /note= "potential phosphorylation site"
 FT Modified-site 70 /note= "potential phosphorylation site"
 FT Modified-site 70 /note= "potential phosphorylation site"
 XX
 PN WO200153468-A2.
 XX
 PD 26-JUL-2001.
 XX
 PR 18-JAN-2001; 2001WO-US002060.
 XX
 PR 21-JAN-2000; 2000US-0177732P.
 PR 28-JAN-2000; 2000US-017885P.
 PR 11-FEB-2000; 2000US-0181863P.
 PR 17-FEB-2000; 2000US-0183683P.
 XX
 PA (INCYTE GENOMICS INC.
 XX
 PI Yue H, Hillman JL, Tang YT, Azimzai Y, Gandhi AR, Baughn MR;
 PI Lu DAM, Nguyen DB, Walla NK;
 XX

DR WPI; 2001-476115/51.
DR N-PSDB; AAH42606.
XX
PT New lipid metabolism enzymes and the polynucleotides encoding them,
PT useful in diagnosing, treating, and preventing cancer, neurological,
PT autoimmune, inflammatory, gastrointestinal or cardiovascular disorders.
XX
PS Claim 1; Page 111; 121pp; English.
XX
CC The present sequence represents a human lipid metabolism enzyme (LME).
CC LME proteins and nucleic acids are useful in diagnosing, treating, and
CC preventing cancer, neurological, autoimmune, inflammatory,
CC gastrointestinal, and cardiovascular disorders, and in assessing the
CC effects of exogenous compounds on the expression LME. LME may also be
CC used to treat or prevent a disorder associated with decreased expression
CC or activity of LME, such as tumours or cancers (e.g. adenocarcinoma,
CC leukemia, lymphoma), motor neuron disorders, multiple sclerosis and other
CC demyelinating diseases, developmental disorders of the central nervous
CC system, bacterial, viral, fungal and parasitic diseases. LME may further
CC be used to screen for compounds that specifically bind to or modulate the
CC activity of LME, and to produce antibodies. LME polynucleotides are
CC useful for somatic and germline gene therapy, to detect and quantify gene
CC expression in biopsied tissues in which expression of LME may be
CC correlated with disease, to detect the presence of associated disorders,
CC to analyse the proteome of a tissue or cell type, to generate
CC hybridization probes, and to screen libraries of compounds in various
CC drug screening techniques
XX
SQ Sequence 152 AA;
Query Match 100.0%; Score 25; DB 4; Length 152;
Best Local Similarity 50.0%; Pred. No. 3.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 1 XQXXVXKH 8
Db 26 FQRRVKKH 33
RESULT 60
AAO29517
ID AAO29517 standard; protein; 152 AA.
XX
AC AAO29517;
XX
DT 27-AUG-2003 (first entry)
XX
DE Human phospholipase (33524).
XX
KW Human; neurological disorder; stress urinary incontinence; prostate cancer;
KW benign prostatic hyperplasia; overactive bladder; oversensitive bladder;
KW overflow urinary incontinence; gene therapy; nephrotropic; prostatitis;
KW kidney disorder; enzyme; phospholipase.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 142
FT /label= Unknown
FT /note= "Encoded by CRG"
XX
PD WO2003039475-A2.
XX
PD 15-MAY-2003.
XX
PF 07-NOV-2002; 2002WO-US035824.
XX
PR 07-NOV-2001; 2001US-0344552P.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI S11os-Santiago I;
XX

DR WPI; 2003-449396/42.
DR N-PSDB; AAL59915.
XX
PT Identifying a compound, capable of treating urological disorder e.g.,
PT benign prostatic hyperplasia, by assaying the ability of the compound to
PT modulate 313, 333, 5464, 188717 or 33524 nucleic acid expression or
PT polypeptide activity.
XX
PS Disclosure; Page 87; 87pp; English.
XX
CC The invention relates to a method for treating an urological disorder
CC which comprises assaying the ability of the compound to modulate 313,
CC 333, 5464, 188717 or 33524 nucleic acid expression or polypeptide
CC activity. The method is useful for identifying a compound for treating an
CC urological disorder comprising urinary incontinence e.g., overactive/
CC oversensitive bladder, overflow urinary incontinence, stress urinary
CC incontinence caused by dysfunction of the bladder, uretra or central/
CC peripheral nervous system, prostatitis, benign prostatic hyperplasia,
CC prostate cancer or kidney disorders. It is also used in gene therapy. The
CC present sequence is human phospholipase (33524) protein. This sequence is
CC used to illustrate the method of the invention
XX
SQ Sequence 152 AA;
Query Match 100.0%; Score 25; DB 6; Length 152;
Best Local Similarity 50.0%; Pred. No. 3.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 1 XQXXVXKH 8
Db 26 FQRRVKKH 33
RESULT 61
ADC39186
ID ADC39186 standard; protein; 157 AA.
XX
AC ADC39186;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human NOVX polypeptide SEQ ID NO: 128.
XX
KW antidiabetic; cytostatic; immunomodulator; anorectic; antiinfective;
KW nootropic; neuroprotective; immunostimulant; antiparkinsonian; anti-HIV;
KW antiaesthetic; antiinflammatory; hypotensive; antiarteriosclerotic;
KW hemostatic; osteopathic; gene therapy.; NOVX; diabetes; obesity; cancer;
KW lymphoma; uterus cancer; prostate cancer; dyslipidemia; anorexia;
KW wasting disorder; Alzheimer's disease; Parkinson's disorder; cachexia;
KW cardiomyopathy; AIDS; asthma; Crohn's disease; multiple sclerosis;
KW hypertension; atherosclerosis; hemophilia; graft-versus-host disease;
KW Albright hereditary osteodystrophy.
XX
OS Homo sapiens.
XX
PN WO2003010327-A2.
XX
PD 06-FEB-2003.
XX
PF 02-MAY-2002; 2002WO-US014199.
XX
PR 02-MAY-2001; 2001US-0288063P.
PR 03-MAY-2001; 2001US-0288395P.
PR 07-MAY-2001; 2001US-0289087P.
PR 09-MAY-2001; 2001US-0289817P.
PR 09-MAY-2001; 2001US-0289818P.
PR 11-MAY-2001; 2001US-0290194P.
PR 14-MAY-2001; 2001US-0290753P.
PR 15-MAY-2001; 2001US-0291181P.
PR 16-MAY-2001; 2001US-0291243P.
PR 18-MAY-2001; 2001US-0292001P.
PR 21-MAY-2001; 2001US-0292374P.
PR 22-MAY-2001; 2001US-0292587P.

XX	23-MAY-2001	2001US-0293107P	
PR	25-MAY-2001	2001US-0293747P	
PR	29-MAY-2001	2001US-0294109P	
PR	29-MAY-2001	2001US-0294110P	
PR	30-MAY-2001	2001US-0294434P	
PR	31-MAY-2001	2001US-0294827P	
PR	12-JUL-2001	2001US-0304879P	
PR	31-JUL-2001	2001US-0308901P	
PR	14-AUG-2001	2001US-0312270P	
PR	17-AUG-2001	2001US-0313416P	
PR	10-SEP-2001	2001US-0318463P	
PR	27-SEP-2001	2001US-0325683P	
PR	18-OCT-2001	2001US-0330292P	
PR	28-NOV-2001	2001US-0333873P	
PR	03-DEC-2001	2001US-0335909P	
PR	03-DEC-2001	2001US-0337552P	
PR	21-FEB-2002	2002US-0359245P	
PR	01-MAY-2002	2002US-00136826	
XX			
PA	(CURA-)	CURAGEN CORP.	
XX			
PI	Miller CE, Kekuda R, Malpankar UM, Li L, Pena CE, Spytek KA;		
PI	Gorman L, Guo X, Fernandes ER, Smtlison G, Stone DJ, Zarschen BD;		
PI	Patturajan M, Anderson DW, Mezes PS, Peyman JA, MacDougall JR;		
PI	Padiguru M, Rasetelli L, Shenoy SG, Gerlach VL, Shinkets RA, Zhong M;		
PI	Edlinger SR, Ellerman K;		
XX			
DR	WPI: 2003-239445/23.		
DR	N-PSDB; ADC39185.		
XX			
PT	New NOVX polypeptides and polynucleotides, useful in gene therapy,		
PT	particularly for treating or preventing a syndrome associated with a		
PT	human disease (e.g. diabetes, obesity, cancer, Alzheimer's disease,		
PT	hypertension or hemophilia).		
XX			
PS	Claim 1; SEQ ID NO 128; 748bp; English.		
XX			
CC	The invention relates to new isolated NOVX polypeptides, the genes		
CC	encoding them or sequences having at least 95% identity to the amino acid		
CC	or nucleotide sequences. The NOVX polypeptide is useful as a therapeutic,		
CC	particularly in the manufacture of a medicament for treating a syndrome		
CC	associated with a human disease, which includes a pathology associated		
CC	with NOVX polypeptide. The NOVX polypeptide is particularly useful for		
CC	treating, preventing or alleviating pathology associated with NOVX		
CC	polypeptide in a mammal, e.g. a human. The NOVX nucleic acid and		
CC	polypeptide are especially useful for treating or preventing e.g.		
CC	diabetes, obesity, cancers (e.g. lymphoma, uterus cancer or prostate		
CC	cancer), dyslipidemias, anorexia, wasting disorders, Alzheimer's disease,		
CC	Parkinson's disorder, cachexia, cardiomyopathy, AIDS, asthma, Crohn's		
CC	disease, multiple sclerosis, hypertension, atherosclerosis, hemophilia,		
CC	graft-versus-host disease or Albritght hereditary osteodys trophy. The DNA		
CC	encoding the protein is useful in gene therapy for treating the above		
CC	conditions. These are also useful in developing powerful assay system for		
CC	functional analysis of various human disorders, as well as in diagnostic		
CC	applications. This sequence represents one of the NOVX proteins of the		
CC	invention.		
XX			
XX			
SO	Sequence 157 AA:		
	Query Match	100.0%;	Score 25; DB 7; Length 157;
	Best Local Similarity	50.0%;	Pred. No. 3.2e+03;
	Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;		
OY	1 XXXXXVXHI 8		
	: ::: ::		
DB	31 FORRVKHI 38		
	RESULT 62		
ID	AAR63044		
XX	AAR63044 standard; protein; 158 AA.		
CC	AAR63044;		

[illegible]

XX 09-NOV-1999; 990US-0164258P.
 XX (GLAXO) GLAXO GROUP LTD.
 PA
 XX
 PI Kimmerly WJ;
 XX WPI; 2001-316495/33.
 DR N-PSDB; AAH53628.
 XX
 PT Nucleic acid encoding polypeptides from *Staphylococcus epidermidis*,
 PT useful for vaccinating against infections, e.g. endocarditis.
 XX
 XX Claim 18; Page 695; 2188pp; English.
 PS
 XX AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
 CC (II), given in AAG81454 to AAG83120, from *Staphylococcus epidermidis*. (I)
 CC and (II) can have antibacterial activity and therefore can be used in
 CC vaccination. The nucleic acids (I) may be used to produce the S.
 CC epidermidis polypeptides (II) via the production of vectors containing
 CC them which are used to produce hosts cells which express the
 CC polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
 CC used to vaccinate subjects and to raise antibodies against the bacteria.
 CC The polypeptides may also be used to assay for other inhibitors of their
 CC activity and therefore identify compounds that may be used for the
 CC treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
 CC AAH55090 represent specifically claimed S. epidermidis genomic DNA
 CC polynucleotide sequences from the present invention. AAH55091 to AAH55098
 CC represent oligonucleotide sequences and primers which are used in the
 CC exemplification of the present invention. N.B. The present invention
 CC specifically claims all the polynucleotide sequences given in the
 CC sequence listing of the present specification, however the sequence
 CC listing only goes up to SEQ ID NO:4454 so even though sequences are given
 CC in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present
 CC for SEQ ID NO:4455 to 4464
 XX
 SQ Sequence 158 AA;
 Query Match 100.0%; Score 25; DB 4; Length 158;
 Best Local Similarity 50.0%; Pred. No. 3.2e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHI 8
 : : : : :
 : : : : :
 Db 51 EQPMVAHI 58
 RESULT 64
 ABG06244
 ID ABG06244 standard; protein; 159 AA.
 XX
 AC ABG06244;
 XX
 DT 13-FEB-2002 (first entry)
 XX
 DE Novel human diagnostic protein #6235.
 XX
 KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
 KW food supplement; medical imaging; diagnostic; genetic disorder.
 XX
 OS Homo sapiens.
 XX
 PN WO200175067-A2.
 XX
 PD 11-OCT-2001.
 XX
 PF 30-MAR-2001; 2001WO-US008631.
 XX
 PR 31-MAR-2000; 2000US-00540217.
 PR 23-AUG-2000; 2000US-00649167.
 XX
 PA (HYSE-) HYSEQ INC.
 XX

PI Drmanac RT, Liu C, Tang YT;
 XX WPI; 2001-639362/73.
 DR N-PSDB; AAS70431.
 XX
 PT New isolated polynucleotide and encoded polypeptides, useful in
 PT diagnostics, forensics, gene mapping, identification of mutations
 PT responsible for genetic disorders or other traits and to assess
 PT biodiversity.
 XX
 PS Claim 20; SEQ ID NO 36603; 103pp; English.
 XX
 XX The invention relates to isolated polynucleotide (I) and polypeptide (II)
 CC sequences. (I) is useful as hybridisation probes, polymerase chain
 CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
 CC and in recombinant production of (II). The polynucleotides are also used
 CC in diagnostics as expressed sequence tags for identifying expressed
 CC genes. (I) is useful in gene therapy techniques to restore normal
 CC activity of (II) or to treat disease states involving (II). (II) is
 CC useful for generating antibodies against it, detecting or quantitating a
 CC polypeptide in tissue, as molecular weight markers and as a food
 CC supplement. (II) and its binding partners are useful in medical imaging
 CC of sites expressing (II). (I) and (II) are useful for treating disorders
 CC involving aberrant protein expression or biological activity. The
 CC polypeptide and polynucleotide sequences have applications in
 CC diagnostics, forensics, gene mapping, identification of mutations
 CC responsible for genetic disorders or other traits to assess biodiversity
 CC and to produce other types of data and products dependent on DNA and
 CC amino acid sequences. ABG0010-ABG3037 represent novel human diagnostic
 CC amino acid sequences of the invention. Note: The sequence data for this
 CC patent did not appear in the printed specification, but was obtained in
 CC electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 159 AA;
 Query Match 100.0%; Score 25; DB 4; Length 159;
 Best Local Similarity 50.0%; Pred. No. 3.2e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHI 8
 : : : : :
 : : : : :
 Db 48 LQPVVHI 55
 RESULT 65
 ABB99217
 ID ABB99217 standard; protein; 159 AA.
 XX
 AC ABB99217;
 XX
 DT 16-DEC-2002 (first entry)
 XX
 DE Ribosomal protein S11-17.49.
 XX
 KW Ribosomal protein S11-17.49; cancer; HIV.
 XX
 OS Unidentified.
 XX
 PN CN1342675-A.
 XX
 PD 03-APR-2002.
 XX
 PF 12-SEP-2000; 2000CN-00125122.
 XX
 PR 12-SEP-2000; 2000CN-00125122.
 XX
 PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
 XX
 PI Mao Y, Xie Y;
 XX WPI; 2002-520753/56.
 DR N-PSDB; ABV72706.
 DR

XX Novel ribosomal protein S11-17.49 for treating e.g. cancer and HIV
 PT infection.
 XX
 XX Claim 1; Page 25-26 (Disclosure); 30pp; Chinese.
 PS
 CC The invention relates to the novel ribosomal protein S11-17.49, and the
 CC polynucleotide encoding it. The ribosomal protein is useful for treating
 CC several diseases such as cancer and HIV infection. The sequence
 CC represents the ribosomal protein S11-17.49 of the invention
 CC
 XX Sequence 159 AA;
 SQ
 Query Match 100.0%; Score 25; DB 5; Length 159;
 Best Local Similarity 50.0%; Pred. No. 3.2e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QXXXVXHI 8
 :|::|:
 Db 105 KQKGVPHI 112
 RESULT 66
 AAU49164
 ID AAU49164 standard; protein; 161 AA.
 XX
 AC AAU49164;
 XX
 DT 27-FEB-2002 (first entry)
 XX
 DE Propionibacterium acnes immunogenic protein #10060.
 XX
 KM SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis;
 KM uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;
 KM inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;
 KM dermatological; osteopathic; neuroprotectant.
 XX
 OS Propionibacterium acnes.
 XX
 PN WO200181581-A2.
 PD 01-NOV-2001.
 XX
 PF 20-APR-2001; 2001WO-US012865.
 XX
 PR 21-APR-2000; 2000US-0199047P.
 PR 02-JUN-2000; 2000US-0208841P.
 PR 07-JUL-2000; 2000US-0216747P.
 XX
 PA (CORI-) CORIXA CORP.
 PI
 PI Skeiky YAW, Persing DH, Mitcham JL, Wang SS, Bhatia A;
 PI L'maisonneuve J, Zhang Y, Jen S, Carter D;
 XX
 DR WPI: 2001-616774/71.
 DR N-PSDB: AAS59545.
 XX
 PT Propionibacterium acnes polypeptides and nucleic acids useful for
 PT vaccinating against and diagnosing infections, especially useful for
 PT treating acne vulgaris.
 PT
 XX Example 1; SEQ ID NO 10359; 1069pp; English.
 PS
 CC Sequences AAU93105-AAU68017 represent Propionibacterium acnes immunogenic
 CC polypeptides. The proteins and their associated DNA sequences are used in
 CC the treatment, prevention and diagnosis of medical conditions caused by
 CC P. acnes. The disorders include SAPHO syndrome (synovitis, acne,
 CC pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis.
 CC P. acnes is also involved in infections of bone, joints and the central
 CC nervous system, however it is particularly involved in the inflammatory
 CC lesions associated with acne vulgaris. A method for detecting the
 CC presence or absence of P. acnes in a patient comprises contacting a
 CC sample with a binding agent that binds to the proteins of the invention

CC and determining the amount of bound protein in the sample. The
 CC polypeptides may be used as antigens in the production of antibodies
 CC specific for P. acnes proteins. These antibodies can be used to
 CC downregulate expression and activity of P. acnes polypeptides and
 CC therefore treat P. acnes infections. The antibodies may also be used as
 CC diagnostic agents for determining P. acnes presence, for example, by
 CC enzyme linked immunosorbent assay (ELISA). Note: The sequence data for
 CC this patent did not form part of the printed specification, but was
 CC obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 161 AA;
 SQ
 Query Match 100.0%; Score 25; DB 4; Length 161;
 Best Local Similarity 50.0%; Pred. No. 3.3e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QXXXVXHI 8
 :|::|:
 Db 72 SQGGVPHI 79
 RESULT 67
 ABM45683
 ID ABM45683 standard; protein; 161 AA.
 XX
 AC ABM45683;
 XX
 DT 20-OCT-2003 (first entry)
 XX
 DE Propionibacterium acnes predicted ORF-encoded polypeptide #10359.
 XX
 KM Acne vulgaris; antiseborrheic; dermatological; antibacterial;
 KM immunostimulant; immune response; vaccine.
 KM
 OS Propionibacterium acnes.
 XX
 PN WO2003033515-A1.
 PD 24-APR-2003.
 XX
 PF 11-OCT-2002; 2002WO-US032727.
 XX
 PR 15-OCT-2001; 2001US-00978825.
 XX
 PA (CORI-) CORIXA CORP.
 PI
 PI Mitcham JL, Skeiky YAW, Persing DH, Bhatia A, Maisonneuve JL;
 PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DR, Jones R, Carter D;
 PI Barth B, Valleeve-Douglas J;
 XX
 DR WPI: 2003-381789/36.
 DR N-PSDB: ACF64474.
 XX
 PT New Propionibacterium acnes polypeptides and polynucleotides encoding the
 PT polypeptide, useful for diagnosing, preventing or treating acne vulgaris,
 PT or for stimulating an immune response specific for a P. acnes protein.
 PT
 XX Example 1; SEQ ID NO 10359; 1481pp; English.
 PS
 CC The invention relates to an isolated polynucleotide (ACF64435-ACF64733)
 CC encoding a Propionibacterium acnes protein. The invention also relates to
 CC polypeptides encoded by the polynucleotides (ABM35624-ABM64536) and to
 CC immunogenic fragments of P. acnes polypeptides. The invention
 CC additionally encompasses expression vectors and host cells comprising a
 CC polynucleotide of the invention; antibodies against polypeptides of the
 CC invention; fusion proteins comprising a polypeptide of the invention; a
 CC method for stimulating an immune response specific for a P. acnes
 CC polypeptide and an isolated T cell population comprising T cells prepared
 CC via this method; a vaccine composition (comprising P. acnes polypeptides,
 CC polynucleotides, antibodies, fusion proteins, T cell populations, or
 CC antigen-presenting cells that express the polypeptide); a method and kit
 CC for detecting or determining the presence or absence of P. acnes in a

CC patient; and a method for inhibiting the development of *P. acnes* in a
 CC patient. The *P. acnes* polypeptides, polynucleotides, antibodies, fusion
 CC proteins, T cell populations or antigen-presenting cells that express the
 CC polypeptides are useful for diagnosing, preventing or treating acne
 CC vulgaris, or for stimulating an immune response specific for a *P. acnes*
 CC protein. The polynucleotides can also be used as probes or primers for
 CC nucleic acid hybridisation. The vaccine composition is useful for the
 CC stimulation of an immune response against *P. acnes*, or for treating acne,
 CC and the kit is useful for performing a diagnostic assay. The present
 CC sequence represents a polypeptide predicted to be encoded by an ORF (open
 CC reading frame) contained within the *P. acnes* polynucleotides of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 161 AA;

Query Match 100.0%; Score 25; DB 6; Length 161;
 Best Local Similarity 50.0%; Pred. No. 3.3e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XXXVXXHI 8
 Db 72 SQGGVPHI 79

RESULT 68

ABR41393 standard; protein; 162 AA.

XX ABR41393;

DT 02-JUN-2003 (first entry)

XX Human DITHP zinc finger transcriptional regulator.

XX Human; dithp; diagnostic and therapeutic polynucleotide; diagnosis;
 KW cancer; cell proliferative disorder; autoimmune disorder;
 KW inflammatory disorder; infection; hormonal disorder; metabolic disorder;
 KW neurological disorder; gastrointestinal disorder; transport disorder;
 KW connective tissue disorder; drug screening; proteome analysis;
 KW gene therapy; antisense therapy; genotyping; transgenic animal; knock in;
 KW disease model; toxicological testing; transcript imaging; zinc finger;
 KW transcriptional regulator.

XX Homo sapiens.

XX WO200297031-A2.

XX 05-DEC-2002.

PF 27-MAR-2002; 2002WO-US010056.

XX 28-MAR-2001; 2001US-0279619P.

PR 29-MAR-2001; 2001US-0280067P.

PR 29-MAR-2001; 2001US-0280068P.

PR 16-MAY-2001; 2001US-0291280P.

PR 17-MAY-2001; 2001US-0291829P.

PR 17-MAY-2001; 2001US-0291849P.

PR 19-JUN-2001; 2001US-0299428P.

PR 20-JUN-2001; 2001US-0299776P.

PR 20-JUN-2001; 2001US-0300001P.

XX (INCY-) INCYTE GENOMICS INC.

XX Daffo A, Jones AL, Tran AB, Dahl CR, Gietzen D, Chinn J,
 PI Dufour GE, Hillman JU, Yu JT, Tuason O, Yap PE, Amshey SR;
 PI Daugherty SC, Dam TC, Liu TF, Nguyen DA, Kleefeld Y, Gerstein EH;
 PI Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris B,
 PI Flores V, Marwaha R, Lo A, Lan RV, Urashka ME;
 XX WPI; 2003-129518/12.
 DR N-PSDB; ACC46333.

XX Novel human diagnostic and therapeutic polypeptide useful for identifying
 PT test compound which specifically binds to a polypeptide encoded by human
 PT diagnostic and therapeutic polynucleotide, and to induce antibodies.

PS Claim 27; SEQ ID NO 928; 591bp; English.

XX The invention relates to novel human diagnostic and therapeutic
 CC polynucleotides designated dithp (ACC46080-ACC46749) and to their encoded
 CC proteins (DITHP; ABR41393-ABR41812). The invention also relates to
 CC polynucleotide sequences at least 90% identical to the dithp cDNA
 CC sequences of the invention; recombinant vectors, host cells and
 CC transgenic organisms comprising a dithp nucleic acid sequence; the
 CC recombinant production of DITHP proteins; antibodies specific for DITHP
 CC proteins; microarrays comprising dithp nucleic acid sequences; methods of
 CC detecting dithp nucleotide and protein sequences; methods of screening
 CC for compounds which specifically bind a DITHP protein; and methods of
 CC assessing the toxicity of test compounds using a dithp hybridisation
 CC probe. Dithp nucleic acid sequences and DITHP proteins may be used in the
 CC diagnosis of a wide variety of conditions including cancer and other cell
 CC proliferative disorders; autoimmune or inflammatory disorders; bacterial,
 CC viral, fungal or parasitic infections; hormonal disorders; metabolic
 CC disorders; neurological disorders; gastrointestinal disorders; transport
 CC disorders; and connective tissue disorders. They may also be used to
 CC screen for modulators of protein activity or gene expression. DITHP
 CC proteins can additionally be used in analysis of the proteome of a tissue
 CC or cell type and to induce antibodies. The dithp nucleic acids are
 CC additionally useful in somatic or germline gene therapy of the disorders
 CC mentioned above, as a source of antisense sequences, as a source of
 CC probes and primers, in genotyping and identification of individuals, in
 CC the generation of transgenic animal models of human disease or knock in
 CC humanised animals, in toxicological testing, and in transcript imaging.
 CC The present sequence represents a DITHP protein which has zinc finger-
 CC type transcriptional regulator activity. Note: The sequence data for this
 CC patent did not form part of the printed specification, but was obtained
 CC in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 162 AA;

Query Match 100.0%; Score 25; DB 6; Length 162;
 Best Local Similarity 50.0%; Pred. No. 3.3e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XXXVXXHI 8
 Db 109 KQSEVPHI 116

RESULT 69

AAM86157 standard; protein; 163 AA.

XX AAM86157;

DT 07-NOV-2001 (first entry)

XX Human immune/haematopoietic antigen SEQ ID NO:13750.

XX Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
 KW cytoskeletal; gene therapy; vaccine; metastasis.

XX Homo sapiens.

XX WO200157182-A2.

XX 09-AUG-2001.

PF 17-JAN-2001; 2001WO-US001354.

XX 31-JAN-2000; 2000US-0179065P.

PR 04-FEB-2000; 2000US-0180628P.

PR 24-FEB-2000; 2000US-0184664P.

PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214868P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0230963P.
PR 26-JUL-2000; 2000US-0230964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 23-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR XX

PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241765P.
PR 20-OCT-2000; 2000US-0241766P.
PR 20-OCT-2000; 2000US-0241767P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249246P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249298P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250311P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251865P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR XX

(HUMA-) HUMAN GENOME SCI INC.

Rosen CA, Barash SC, Ruben SM,

WPI; 2001-483426/52.
DR N-PSDB; AAKS8938.

PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.

PS Claim 11, SEQ ID NO 13750; 3071pp + Sequence Listing; English.

XX

CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
 CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytosolic
 CC activity, and can be used in gene therapy and vaccine production. (I)
 CC proteins and polynucleotides may be used in the prevention, diagnosis and
 CC treatment of diseases associated with inappropriate (I) expression. For
 CC example, they may be used to treat disorders associated with decreased
 CC expression by rectifying mutations or deletions in a patient's genome
 CC that affect the activity of (I) by expressing inactive proteins or to
 CC supplement the patient's own production of (I). Additionally, (I)
 CC polynucleotides may be used to produce the secreted (I), by inserting the
 CC nucleic acids into a host cell and culturing the cell to express the
 CC protein. (I) proteins and polynucleotides may be used to prevent,
 CC diagnose and treat immune/haematopoietic-related diseases, especially
 CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
 CC to AAK87694 represent human immune/haematopoietic antigen genomic
 CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
 CC represent sequences used in the exemplification of the present invention
 CC
 XX SQ Sequence 163 AA;

Query Match 100.0%; Score 25; DB 4; Length 163;
 Best Local Similarity 50.0%; Pred. No. 3.3e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHI 8
 :|::|::|
 Db 15 QQHLVTHI 22

RESULT 70
 AAM78156
 ID AAM78156 standard; protein; 164 AA.
 XX AC AAM78156;
 XX DT 13-APR-1999 (first entry)
 XX DE Human secreted protein encoded by gene 31 clone HTLAV68.
 XX KM Human; secreted protein; fusion protein; gene therapy; protein therapy;
 KM diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
 KM developmental abnormality; foetal deficiency; blood; allergy; renal;
 KM immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
 KM inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
 KM congenital disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
 KM osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
 KM endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
 XX OS Homo sapiens.
 XX XX
 FH Key Location/Qualifiers
 FT Misc-difference 51
 FT Misc-difference 82 /label= unknown
 FT Misc-difference 89.91 /label= unknown
 FT Misc-difference 163.164 /label= unknown
 FT Misc-difference 163.164 /label= unknown
 XX WO9856804-A1.
 PD 17-DEC-1998.
 XX XX
 PF 11-JUN-1998; 98WO-US012125.
 XX XX
 PR 13-JUN-1997; 97US-0049547P.
 PR 13-JUN-1997; 97US-0049548P.
 PR 13-JUN-1997; 97US-0049549P.
 PR 13-JUN-1997; 97US-0049550P.
 PR 13-JUN-1997; 97US-0049556P.
 PR 13-JUN-1997; 97US-0049666P.
 PR 13-JUN-1997; 97US-0049607P.

PR 13-JUN-1997; 97US-0049608P.
 PR 13-JUN-1997; 97US-0049609P.
 PR 13-JUN-1997; 97US-0049610P.
 PR 13-JUN-1997; 97US-0049611P.
 PR 13-JUN-1997; 97US-0050901P.
 PR 13-JUN-1997; 97US-0052989P.
 PR 13-JUN-1997; 97US-0051919P.
 PR 08-AUG-1997; 97US-0055984P.
 PR 18-AUG-1997; 97US-0058665P.
 PR 12-SEP-1997; 97US-0058666P.
 PR 12-SEP-1997; 97US-0058668P.
 PR 12-SEP-1997; 97US-0058669P.
 PR 12-SEP-1997; 97US-0058750P.
 PR 12-SEP-1997; 97US-0058971P.
 PR 12-SEP-1997; 97US-0058972P.
 PR 12-SEP-1997; 97US-0058975P.
 PR 02-OCT-1997; 97US-0060834P.
 PR 02-OCT-1997; 97US-0060841P.
 PR 02-OCT-1997; 97US-0060844P.
 PR 02-OCT-1997; 97US-0060852P.
 PR 02-OCT-1997; 97US-0061059P.
 PR 02-OCT-1997; 97US-0061060P.
 XX XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX XX
 PI Moore PA, Shi Y, Rosen CA, Ruben SM, Lafleur DW, Olsen HS,
 PI Ebner R, Brewer LA, Young P, Greene JM, Ferris AM, Yu G, Ni J;
 PI Feng P;
 XX XX
 DR WPI, 1999-080881/07.
 DR N-PSDB; AAX04341.
 XX XX
 PT New isolated human genes and the secreted polypeptides they encode -
 PT useful for diagnosis and treatment of e.g. cancers, neurological
 PT disorders, immune diseases, inflammation or blood disorders.
 XX XX
 PS Claim 11; Page 279-280; 380pp; English.
 XX XX
 CC This sequence represents a secreted human protein encoded by the gene
 CC clone detailed in the descriptor line. The gene can be used to generate
 CC fusion proteins by linking to the gene to a human immunoglobulin Fc
 CC portion (e.g. AAX04302) for increasing the stability of the fused protein
 CC as compared to the human protein only. The invention relates to 86 novel
 CC genes and their fragments (nucleic acid sequences: AAX04311-X04410; amino
 CC acid sequences AAM78126-W78225) which are useful for preventing, treating
 CC or ameliorating medical conditions e.g. by protein or gene therapy. Also,
 CC pathological conditions can be diagnosed by determining the amount of the
 CC new polypeptides in a sample or by determining the presence of mutations
 CC in the new polynucleotides. Specific uses are described for each of the
 CC 86 polynucleotides, based on which tissues they are most highly expressed
 CC in (see AAX04311 for described uses)
 CC
 XX SQ Sequence 164 AA;

Query Match 100.0%; Score 25; DB 2; Length 164;
 Best Local Similarity 50.0%; Pred. No. 3.4e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHI 8
 :|::|::|
 Db 58 IQSSVTHI 65

RESULT 71
 ABP64903
 ID ABP64903 standard; protein; 169 AA.
 XX AC ABP64903;
 XX DT 25-FEB-2003 (first entry)
 XX DE Human protein SEQ ID 563.
 XX KM Human; expressed sequence tag; EST; haematopoietic disorder;

KW central nervous system disease; viral infection;
 KW peripheral nervous system disease; non-healing wound; infectious disease;
 KW immune deficiency; immune disorder; bacterial infection; allergy; cancer;
 KW fungal infection; autoimmune disorder; coagulation disorder; noctropic;
 KW antiallergic; antiinflammatory; immunosuppressive; neuroprotective;
 KW cytostatic; haemostatic; virucide; antibacterial; fungicide;
 KW immunostimulant; cerebroprotective.
 XX
 OS Homo sapiens.
 PN WO200259260-A2.
 PD 01-AUG-2002.
 PF 16-NOV-2001; 2001WO-US042950.
 PR 17-NOV-2000; 2000US-00714936.
 PA (HYSEQ-) HYSEQ INC.
 PI Tang YT, Goodrich RW, Liu C, Zhou P, Asundi V, Zhang J, Zhao QA;
 PI Ren F, Xue AJ, Yang Y, Wehrman T, Dymnac RT;
 DR WPI; 2002-590824/63.
 DR N-PSDB; ABO99489.
 XX
 PT New isolated polynucleotide, useful in research, diagnostic or
 PT therapeutic methods, e.g. preventing or treating disorders involving
 PT aberrant protein expression or biological activity.
 PT
 PS Claim 20; SEQ ID NO 563; 394pp; English.
 XX
 CC The present invention relates to novel human coding sequences (AB099268-
 CC AB099608) and proteins (ABP64682-ABP65022). The sequences are useful in
 CC therapeutic, diagnostic and research methods. The polynucleotides may be
 CC used in the field of molecular biology as hybridisation probes, primers
 CC for PCR, for chromosome and gene mapping, for the recombinant production
 CC of protein, or in generation of anti-sense DNA or RNA. The
 CC polynucleotides are useful in diagnostics as expressed sequence tags
 CC (ESTs) for identifying expressed genes or for physical mapping of the
 CC human genome. The proteins may be used as molecular weight markers, or as
 CC nutritional sources or supplements. The proteins may be used to maintain
 CC and expand cell population in a totipotent or pluripotent state
 CC useful for re-engineering damaged or diseased tissues, transplantation.
 CC manufacture of bio-pharmaceuticals or the development of bio-sensors. The
 CC polynucleotides and proteins are useful for preventing, treating or
 CC ameliorating disorders involving aberrant protein expression or
 CC biological activity, e.g. haematopoietic disorders, central/peripheral
 CC nervous system diseases, mechanical and traumatic disorders, non-healing
 CC wounds, immune deficiencies and disorders, infectious diseases caused by
 CC viral, bacterial or fungal infection, autoimmune disorders, allergic
 CC reactions and conditions, coagulation disorders, or cancer. The
 CC polynucleotide sequences of the invention were assembled from ESTs
 CC isolated mainly by sequencing by hybridisation, and in some cases,
 CC sequences obtained from one or more public databases. Note: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX
 SQ Sequence 169 AA;
 Query March 100.0%; Score 25; DB 5; Length 169;
 Best Local Similarity 50.0%; Pred. No. 3.5e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

XX
 AC AAM47374;
 XX
 DT 04-MAR-2002 (first entry)
 XX
 DE Rat pheromone receptor F14 protein fragment SEQ ID NO: 42.
 XX
 KW Rat; pheromone receptor; aroma detection; perfume analysis;
 KW toxic substance detection; odour trapping.
 XX
 OS Rattus norvegicus.
 PN WO200183549-A2.
 PD 08-NOV-2001.
 PF 03-MAY-2001; 2001WO-FR001354.
 PR 03-MAY-2000; 2000FR-00005651.
 PA (CNRS) CNRS CENT NAT RECH SCI.
 PI Clement J, Renucci M, Fivard A, Marcet B;
 PI WPI; 2002-049336/06.
 DR N-PSDB; ABA05709.
 XX
 PT New pheromone receptors from rat, useful in biosensors for e.g. detecting
 PT aromas and toxins, also related nucleic acids and antibodies.
 PT
 PS Disclosure; Page 45; 62pp; French.
 XX
 CC The present invention provides the protein and coding sequences of a
 CC number of rat pheromone receptors. These receptors are useful in
 CC biosensors for detecting aromas and for quality control in food
 CC processing, for analysis and comparison of perfumes, for detecting toxic
 CC substances and trapping/odours, also for identifying volatile compounds
 CC in general, monitoring either populations of predators or feeding,
 CC detecting drugs or pollutants, identifying humans, identifying compounds
 CC that induce appetite, flight and attraction, and to accelerate or reduce
 CC fertility. The present sequence is a rat pheromone described in the
 CC exemplification of the invention
 CC
 XX
 SQ Sequence 170 AA;
 Query March 100.0%; Score 25; DB 5; Length 170;
 Best Local Similarity 50.0%; Pred. No. 3.5e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHI 8
 Db 155 IQLLVH 162
 XX
 RESULT 73
 AAM47385
 ID AAM47385 standard; protein: 170 AA.
 AC AAM47385;
 DT 04-MAR-2002 (first entry)
 DE Rat pheromone receptor F30 protein fragment SEQ ID NO: 53.
 KW Rat; pheromone receptor; aroma detection; perfume analysis;
 KW toxic substance detection; odour trapping.
 XX
 OS Rattus norvegicus.
 PN WO200183549-A2.
 PD 08-NOV-2001.

PF 03-MAY-2001; 2001WO-FR001354.
XX 03-MAY-2000; 2000FR-00005651.
XX (CNRS) CNRS CENT NAT RECH SCI.
XX
XX Clement J, Renucci M, Tizard A, Marcet B;
PI WPI; 2002-049336/06.
DR N-PSDB; ABA05720.
XX
XX New pheromone receptors from rat, useful in biosensors for e.g. detecting
PT aromas and toxins, also related nucleic acids and antibodies.
XX
XX Disclosure; Page 53; 62pp; French.
XX
XX The present invention provides the protein and coding sequences of a
CC number of rat pheromone receptors. These receptors are useful in
CC biosensors for detecting aromas and for quality control in food
CC processing, for analysis and comparison of perfumes, for detecting toxic
CC substances and trapping odours, also for identifying volatile compounds
CC in general, monitoring either populations of predators or feeding,
CC detecting drugs or pollutants, identifying humans, identifying compounds
CC that induce appetite, flight and attraction, and to accelerate or reduce
CC fertility. The present sequence is a rat pheromone described in the
CC exemplification of the invention
XX
SQ Sequence 170 AA;

Query Match 100.0%; Score 25; DB 5; Length 170;
Best Local Similarity 50.0%; Pred. No. 3.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8
Db 155 IQIFVSHI 162

RESULT 74

AAM47391
ID AAM47391 standard; protein; 170 AA.

XX AAM47391;

XX 04-MAR-2002 (first entry)

XX Rat pheromone receptor M2 protein fragment SEQ ID NO: 59.

XX Rat; pheromone receptor; aroma detection; perfume analysis;
KM toxic substance detection; odour trapping.

XX Rattus norvegicus.

XX WO200183549-A2.

XX 08-NOV-2001.

XX 03-MAY-2001; 2001WO-FR001354.

XX 03-MAY-2000; 2000FR-00005651.

XX (CNRS) CNRS CENT NAT RECH SCI.

XX Clement J, Renucci M, Tizard A, Marcet B;

XX WPI; 2002-049336/06.
XX N-PSDB; ABA05726.

XX New pheromone receptors from rat, useful in biosensors for e.g. detecting
PT aromas and toxins, also related nucleic acids and antibodies.
XX
XX Disclosure; Page 57; 62pp; French.

CC The present invention provides the protein and coding sequences of a
CC number of rat pheromone receptors. These receptors are useful in
CC biosensors for detecting aromas and for quality control in food
CC processing, for analysis and comparison of perfumes, for detecting toxic
CC substances and trapping odours, also for identifying volatile compounds
CC in general, monitoring either populations of predators or feeding,
CC detecting drugs or pollutants, identifying humans, identifying compounds
CC that induce appetite, flight and attraction, and to accelerate or reduce
CC fertility. The present sequence is a rat pheromone described in the
CC exemplification of the invention
XX
SQ Sequence 170 AA;

Query Match 100.0%; Score 25; DB 5; Length 170;
Best Local Similarity 50.0%; Pred. No. 3.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8
Db 155 IQIFVSHI 162

RESULT 75

AAM47392
ID AAM47392 standard; protein; 170 AA.

XX AAM47392;

XX 04-MAR-2002 (first entry)

XX Rat pheromone receptor M6 protein fragment SEQ ID NO: 60.

XX Rat; pheromone receptor; aroma detection; perfume analysis;
KM toxic substance detection; odour trapping.

XX Rattus norvegicus.

XX WO200183549-A2.

XX 08-NOV-2001.

XX 03-MAY-2001; 2001WO-FR001354.

XX 03-MAY-2000; 2000FR-00005651.

XX (CNRS) CNRS CENT NAT RECH SCI.

XX Clement J, Renucci M, Tizard A, Marcet B;

XX WPI; 2002-049336/06.
XX N-PSDB; ABA05727.

XX New pheromone receptors from rat, useful in biosensors for e.g. detecting
PT aromas and toxins, also related nucleic acids and antibodies.
XX
XX Disclosure; Page 57-58; 62pp; French.

XX The present invention provides the protein and coding sequences of a
CC number of rat pheromone receptors. These receptors are useful in
CC biosensors for detecting aromas and for quality control in food
CC processing, for analysis and comparison of perfumes, for detecting toxic
CC substances and trapping odours, also for identifying volatile compounds
CC in general, monitoring either populations of predators or feeding,
CC detecting drugs or pollutants, identifying humans, identifying compounds
CC that induce appetite, flight and attraction, and to accelerate or reduce
CC fertility. The present sequence is a rat pheromone described in the
CC exemplification of the invention
XX
SQ Sequence 170 AA;

Query Match 100.0%; Score 25; DB 5; Length 170;
Best Local Similarity 50.0%; Pred. No. 3.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8
: : : : :
Db 155 IQTFVSHI 162

RESULT 76
ABG07209
ID ABG07209 standard; protein, 172 AA.
XX
AC ABG07209;
XX
DT 13-FEB-2002 (first entry)
XX
DE Novel human diagnostic protein #7200.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KM food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US008631.
XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR N-PSDB; AAS71396.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity.
XX
PS Claim 20; SEQ ID NO 37568; 103pp; English.

CC The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 172 AA;

Query Match 100.0%; Score 25; DB 4; Length 172;
Best Local Similarity 50.0%; Pred. No. 3.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8

Db 61 IQTFVSHI 68
: : : : :
Db 53 IQELVSHI 60

RESULT 77
ABG18197
ID ABG18197 standard; protein, 173 AA.
XX
AC ABG18197;
XX
DT 18-FEB-2002 (first entry)
XX
DE Novel human diagnostic protein #18188.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KM food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US008631.
XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR N-PSDB; AAS82384.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity.
XX
PS Claim 20; SEQ ID NO 48556; 103pp; English.

CC The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 173 AA;

Query Match 100.0%; Score 25; DB 4; Length 173;
Best Local Similarity 50.0%; Pred. No. 3.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8

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RESULT 78
ABM69901
ID ABM69901 standard; protein; 181 AA.
XX
AC ABM69901;
XX
DT 20-NOV-2003 (first entry)
XX
DE Photorhabdus luminescens protein sequence #2998.
XX
KM Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
KM detection; food; gene expression; plant; animal; microorganism; toxin;
KM antibiotic; biopesticide; virulence factor; disease model; plague;
KM whooping cough.
XX
OS Photorhabdus luminescens.
XX
PN W0200294867-A2.
XX
PD 28-NOV-2002.
XX
PF 07-FEB-2002; 2002WO-IB003040.
XX
PR 07-FEB-2001; 2001FR-00001659.
XX
PA (INSP ) INST PASTEUR.
XX (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI Duchaud E, Taourit S, Glaser P, Frangeul L, Kunst F, Danchin A,
PI Buchrieser C;
XX
DR WPI; 2003-148459/14.
XX
PT Genomic sequence of Photorhabdus luminescens and encoded polypeptides,
PT useful e.g. as therapeutic antimicrobials and agricultural pesticides.
XX
PS Claim 2; SEQ ID NO 2998; 1205bp; French.
XX
CC The invention relates to the isolation of genes and their encoded
CC proteins from Photorhabdus luminescens. The isolated sequences are
CC sources of probes and primers for detecting the genome of P. luminescens
CC and related species; to study polymorphisms; for gene analysis and for
CC detection/amplification of the genes; Antibodies (Ab) raised against the
CC polypeptides encoded by the genes are used for detection/identification
CC of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that
CC carry a gene-containing vector are used to select compounds that
CC modulate, regulate, induce or inhibit expression of the genes in plants,
CC animals or microorganisms other than P. luminescens and are able to alter
CC response or sensitivity to toxins and antibiotics produced by P.
CC luminescens. Cells transformed to express the genes are useful for
CC recombinant production of the proteins, particularly toxins and
CC antibacterials useful as insecticides, bactericides and fungicides. The
CC genes, proteins, vectors containing the genes and Ab are also useful
CC therapeutically (to treat microbial infection by bacteria or fungi that
CC are sensitive to P. luminescens-encoded toxins or antibiotics) and as
CC biopesticides. Other uses of the genes and the proteins are as virulence
CC factors and for identifying targets of human diseases for which P.
CC luminescens is a model (particularly plague and whooping cough). This
CC sequence represents one of the isolated P. luminescens proteins
XX
SQ Sequence 181 AA;
XX
Query Match 100.0%; Score 25; DB 6; Length 181;
Best Local Similarity 50.0%; Pred. No. 3.8e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
Db 33 RQKTVKHI 40
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RESULT 79
AAR68871
ID AAR68871 standard; protein; 183 AA.
XX
AC AAR68871;
XX
DT 04-SEP-1995 (first entry)
XX
DE Hepatitis B virus polypeptide clone A6.
XX
KM Hepatitis B virus; HBV; polypeptide A6; diagnosis and detection.
XX
OS Hepatitis B virus.
XX
PN JP6321991-A.
XX
PD 22-NOV-1994.
XX
PF 14-MAY-1993; 93JP-00113136.
XX
PR 14-MAY-1993; 93JP-00113136.
XX
PA (MITU ) MITSUBISHI KASEI CORP.
XX
DR WPI; 1995-041293/06.
XX N-PSDB; AAQ81566.
XX
PT Polypeptide derived from type B hepatitis virus and gene to code it -
PT used in diagnosis of type B hepatitis virus.
XX
PS Claim 1; Page 11-12; 13pp; Japanese.
XX
CC AAQ81566 encodes AAR68871 the hepatitis B virus (HBV) polypeptide A6, the
CC polypeptide or its fragments can be used in the diagnosis and detection
CC of HBV
XX
SQ Sequence 183 AA;
XX
Query Match 100.0%; Score 25; DB 2; Length 183;
Best Local Similarity 50.0%; Pred. No. 3.8e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
Db 98 RQLIVVHI 105
XX
RESULT 80
AAG37616
ID AAG37616 standard; protein; 191 AA.
XX
AC AAG37616;
XX
DT 18-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 46280.
XX
KM Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
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PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130448P.
PR 23-APR-1999; 99US-0130510P.
PR 28-APR-1999; 99US-0130891P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 07-MAY-1999; 99US-0132487P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137724P.
PR 07-JUN-1999; 99US-0138540P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 10-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139453P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139763P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140695P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 01-JUL-1999; 99US-0142154P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
PR 16-JUL-1999; 99US-0144085P.

PR 16-JUL-1999; 99US-0144086P.
PR 19-JUL-1999; 99US-0144325P.
PR 19-JUL-1999; 99US-0144331P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144333P.
PR 19-JUL-1999; 99US-0144334P.
PR 20-JUL-1999; 99US-0144335P.
PR 20-JUL-1999; 99US-0144335P.
PR 20-JUL-1999; 99US-0144632P.
PR 20-JUL-1999; 99US-0144884P.
PR 21-JUL-1999; 99US-0144814P.
PR 21-JUL-1999; 99US-0145086P.
PR 21-JUL-1999; 99US-0145088P.
PR 22-JUL-1999; 99US-0145085P.
PR 22-JUL-1999; 99US-0145087P.
PR 22-JUL-1999; 99US-0145089P.
PR 22-JUL-1999; 99US-0145192P.
PR 23-JUL-1999; 99US-0145145P.
PR 23-JUL-1999; 99US-0145218P.
PR 23-JUL-1999; 99US-0145224P.
PR 26-JUL-1999; 99US-0145276P.
PR 27-JUL-1999; 99US-0145913P.
PR 27-JUL-1999; 99US-0145918P.
PR 27-JUL-1999; 99US-0145918P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
PR 02-AUG-1999; 99US-0146388P.
PR 02-AUG-1999; 99US-0146389P.
PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 04-AUG-1999; 99US-0147302P.
PR 05-AUG-1999; 99US-0147192P.
PR 05-AUG-1999; 99US-0147250P.
PR 06-AUG-1999; 99US-0147303P.
PR 06-AUG-1999; 99US-0147416P.
PR 09-AUG-1999; 99US-0147933P.
PR 09-AUG-1999; 99US-0147935P.
PR 10-AUG-1999; 99US-0148171P.
PR 11-AUG-1999; 99US-0148319P.
PR 12-AUG-1999; 99US-0148341P.
PR 13-AUG-1999; 99US-0148565P.
PR 13-AUG-1999; 99US-0148684P.
PR 16-AUG-1999; 99US-0149368P.
PR 17-AUG-1999; 99US-0149175P.
PR 18-AUG-1999; 99US-0149426P.
PR 18-AUG-1999; 99US-0149722P.
PR 20-AUG-1999; 99US-0149723P.
PR 20-AUG-1999; 99US-0149929P.
PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 25-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
PR 27-AUG-1999; 99US-0151066P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
PR 20-SEP-1999; 99US-0154779P.
PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156458P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
PR 05-OCT-1999; 99US-0157753P.
PR 06-OCT-1999; 99US-0157865P.
PR 07-OCT-1999; 99US-0158029P.

PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
PR 13-OCT-1999; 99US-0159294P.
PR 13-OCT-1999; 99US-0159295P.
PR 14-OCT-1999; 99US-0159329P.
PR 14-OCT-1999; 99US-0159330P.
PR 14-OCT-1999; 99US-0159331P.
PR 14-OCT-1999; 99US-0159637P.
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PR 18-OCT-1999; 99US-0159584P.
PR 21-OCT-1999; 99US-0160741P.
PR 21-OCT-1999; 99US-0160767P.
PR 21-OCT-1999; 99US-0160768P.
PR 21-OCT-1999; 99US-0160770P.
PR 21-OCT-1999; 99US-0160814P.
PR 21-OCT-1999; 99US-0160815P.
PR 22-OCT-1999; 99US-0160980P.
PR 22-OCT-1999; 99US-0160981P.
PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 191;
Best Local Similarity 50.0%; Pred. No. 4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XXXXXHHI 8
: : : : :
Db 124 NOVLMCHI 131

RESULT 81
AAG13674
ID AAG13674 standard; protein; 191 AA.

AC AAG13674;

XX DT 17-OCT-2000 (first entry)

XX DE Arabidopsis thaliana protein fragment SEQ ID NO: 13256.

KM Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.

XX OS Arabidopsis thaliana.

XX PN EPI033405-A2.

XX PD 06-SEP-2000.

XX PF 25-FEB-2000; 2000EP-00301439.

XX PR 25-FEB-1999; 99US-0121825P.

PR 05-MAR-1999; 99US-0123180P.

PR 09-MAR-1999; 99US-0123548P.

PR 23-MAR-1999; 99US-0125788P.

PR 25-MAR-1999; 99US-0126264P.

PR 29-MAR-1999; 99US-0126785P.

PR 01-APR-1999; 99US-0127462P.

PR 06-APR-1999; 99US-0128234P.

PR 08-APR-1999; 99US-0128714P.

PR 16-APR-1999; 99US-0129845P.

PR 19-APR-1999; 99US-0130077P.

PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 14-MAY-1999; 99US-0134376P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 17-JUN-1999; 99US-0139453P.
PR 18-JUN-1999; 99US-0139482P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139753P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140695P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
PR 16-JUL-1999; 99US-0144085P.
PR 16-JUL-1999; 99US-0144086P.
PR 19-JUL-1999; 99US-0144325P.
PR 19-JUL-1999; 99US-0144331P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144333P.
PR 19-JUL-1999; 99US-0144334P.
PR 19-JUL-1999; 99US-0144335P.

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PR 20-JUL-1999; 99US-0144352P.
PR 20-JUL-1999; 99US-0144632P.
PR 20-JUL-1999; 99US-0144884P.
PR 21-JUL-1999; 99US-0144814P.
PR 21-JUL-1999; 99US-0145086P.
PR 21-JUL-1999; 99US-0145086P.
PR 22-JUL-1999; 99US-0145085P.
PR 22-JUL-1999; 99US-0145087P.
PR 22-JUL-1999; 99US-0145088P.
PR 22-JUL-1999; 99US-0145192P.
PR 23-JUL-1999; 99US-0145145P.
PR 23-JUL-1999; 99US-0145224P.
PR 23-JUL-1999; 99US-0145276P.
PR 26-JUL-1999; 99US-0145276P.
PR 27-JUL-1999; 99US-0145913P.
PR 27-JUL-1999; 99US-0145918P.
PR 27-JUL-1999; 99US-0145919P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
PR 02-AUG-1999; 99US-0146388P.
PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 05-AUG-1999; 99US-0147302P.
PR 05-AUG-1999; 99US-0147260P.
PR 06-AUG-1999; 99US-0147303P.
PR 06-AUG-1999; 99US-0147416P.
PR 09-AUG-1999; 99US-0147493P.
PR 09-AUG-1999; 99US-0147935P.
PR 10-AUG-1999; 99US-0148171P.
PR 11-AUG-1999; 99US-0148319P.
PR 12-AUG-1999; 99US-0148341P.
PR 13-AUG-1999; 99US-0148565P.
PR 16-AUG-1999; 99US-0148684P.
PR 17-AUG-1999; 99US-0149175P.
PR 20-AUG-1999; 99US-0149722P.
PR 20-AUG-1999; 99US-0149723P.
PR 20-AUG-1999; 99US-0149929P.
PR 23-AUG-1999; 99US-0149929P.
PR 23-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
PR 27-AUG-1999; 99US-0151066P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
PR 20-SEP-1999; 99US-0154779P.
PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156458P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
PR 05-OCT-1999; 99US-0157753P.
PR 06-OCT-1999; 99US-0157865P.
PR 07-OCT-1999; 99US-0158029P.
PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159295P.
PR 13-OCT-1999; 99US-0159296P.
PR 14-OCT-1999; 99US-0159329P.
PR 14-OCT-1999; 99US-0159330P.

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PR 14-OCT-1999; 99US-0159331P.
PR 14-OCT-1999; 99US-0159637P.
PR 14-OCT-1999; 99US-0159638P.
PR 18-OCT-1999; 99US-0159584P.
PR 21-OCT-1999; 99US-0160741P.
PR 21-OCT-1999; 99US-0160767P.
PR 21-OCT-1999; 99US-0160768P.
PR 21-OCT-1999; 99US-0160770P.
PR 21-OCT-1999; 99US-0160814P.
PR 21-OCT-1999; 99US-0160815P.
PR 22-OCT-1999; 99US-0160980P.
PR 22-OCT-1999; 99US-0160981P.
PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161982P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 191;
Best Local Similarity 50.0%; Pred. No. 4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 QXXVXHI 8
Db 124 NOVLMVQHI 131

RESULT 82
ABP72267
ID ABP72267 standard; protein; 193 AA.
XX
AC ABP72267;
XX
DT 28-APR-2003 (first entry)
XX
DE Human cervical cancer 2 proto-oncogene encoded protein.
XX
KW Human cervical cancer 2; HCC-2; human; cervix cancer; oncogene;
KW diagnosis; cytostatic; gene therapy.
XX
OS Homo sapiens.
XX
PN MO2003002744-A1.
XX
XX 09-JAN-2003.
XX
FD 27-JUN-2002; 2002WO-KR001227.
XX
PF 28-JUN-2001; 2001KR-00037589.
XX
PR (KIM/J) KIM J.
XX
PA (KIM/J) KIM J.
XX
PI Kim J;
XX
XX WPI; 2003-210277/20.
XX
DR N-PSDB; AB258393.
XX
XX Human cervical cancer 2 proto-oncogene for diagnosing cancer.
XX
PS Claim 3; Page 23-24; 26pp; English.
XX
CC The present sequence is that of the protein encoded by novel human
CC cervical cancer 2 (HCC-2) proto-oncogene. HCC-2 is expressed in uterine
CC and cervical cancer tissues but not in normal cervical tissues. It is
CC over-expressed in leukemia, lymphoma, skin, lung and colon cancers. HCC-
CC 2 proto-oncogene can be used in cancer diagnosis, in the construction of
CC transgenic animals and in antisense gene therapy. The protein can be used

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CC to produce an antibody useful as a diagnostic tool, and is also used in a
CC claimed kit for diagnosis of cancer
XX
SQ Sequence 193 AA;

Query Match 100.0%; Score 25; DB 6; Length 193;
Best Local Similarity 50.0%; Pred. No. 4.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KQXVXHI 8
Db 139 KQKGVHI 146

RESULT 83

AAV72167
ID AAV72167 standard; protein; 194 AA.

AC AAV72167;

DT 24-APR-2001 (first entry)

DE Human RNA metabolism protein (RMEP-7).

XX Human; RNA metabolism protein; RMEP; nootropic; neuroleptic; antiulcer;
KW tranquilliser; antianaemic; antidiabetic; immunosuppressive; cytostatic;
KW antiaesthetic; antiinflammatory; anti-HIV; human immunodeficiency virus;
KW antiarthritic; antiarteriosclerotic; antiatherosclerotic; antiallergic;
KW antirheumatoid; antiparkinsonian; antithyroid; nephrotoxic; antiout;
KW thymolmetric; RMEP expression modulator; transgenic; spinal cord disease;
KW nervous system disorder; Alzheimer's disease; therapy; gene therapy;
KW neuromuscular disorder; hepatitis; cancer; cell proliferative disorder;
KW peripheral nervous system disorder; cirrhosis; cranial nerve disorder;
KW progressive neural autonomic nervous system disorder; Addison's disease;
KW amyotrophic lateral sclerosis; autoimmune disorder; drug screening.

KM Homo sapiens.

OS Homo sapiens.

XX Key Location/Qualifiers
FH Region 85..193
FT /note="Ribosomal protein S11, signature sequence of RMEP
FT -7"

XX WO200078952-A2.

XX 28-DEC-2000.

XX PF 15-JUN-2000; 2000WO-US016644.

XX PR 17-JUN-1999; 99US-0139922P.

XX PA (INCY-) INCYTE GENOMICS INC.

XX (BAUG/) BAUGHN M R.

XX Bandman O, Yue H, Lal P, Tang YT, Reddy R, Azimzai Y;

XX WPI; 2001-102723/11.

XX DR N-PSDB; AAD02350.

XX New human RNA metabolism proteins (RMEP), useful for diagnosing,
PT treating, preventing nervous system, cell proliferative,
PT autoimmune/inflammatory disorders associated with abnormal expression of
PT RMEP.

XX Claim 1; Page 88-89; 103pp; English.

XX The present sequence is human RNA metabolism protein (RMEP-7) encoded by
CC a cDNA (Clone ID 2641494) obtained from LUNGCTT08 cDNA library. Agonists
CC and antagonists of RMEP cDNA are useful for treating diseases or
CC conditions associated with altered expression of functional RMEP
CC sequence or their mammalian homologues are useful for creating 'knock
CC out' or 'knock in' humanised animals or transgenic animals to model human
CC disease. RMEP sequence is useful in the diagnosis, prevention and

CC treatment of nervous system disorders e.g. Alzheimer's disease, Pick's
CC disease, Huntington's disease, Parkinson's disease, amyotrophic lateral
CC sclerosis, and other motor neuron disorders, progressive neural autonomic
CC nervous system disorders, cranial nerve disorders, spinal cord diseases,
CC muscular dystrophy and other neuromuscular disorders, peripheral nervous
CC system disorders, mental disorders including anxiety and schizophrenia,
CC amnesia etc, cell proliferative disorders e.g. actinic keratosis,
CC arteriosclerosis, atherosclerosis, cirrhosis, hepatitis, mixed connective
CC tissue disease (MCTD), cancers e.g. adenocarcinoma, leukemia, lymphoma,
CC melanoma etc., and autoimmune/inflammatory disorders such as acquired
CC immuno deficiency syndrome (AIDS), Addison's disease, allergies, anaemia,
CC asthma, diabetes mellitus, rheumatoid arthritis, Grave's disease and
CC autoimmune polyendocrinopathy-candidiasis-ectodermal dystrophy (APCED).
CC RMEP cDNA is useful for somatic or germ-line gene therapy. RMEP sequence
CC is useful several drug screening assays

XX SQ Sequence 194 AA;

Query Match 100.0%; Score 25; DB 4; Length 194;
Best Local Similarity 50.0%; Pred. No. 4.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KQXVXHI 8
Db 140 KQKGVHI 147

RESULT 84

ADBS9099
ID ADBS9099 standard; protein; 194 AA.

AC ADBS9099;

DT 29-JAN-2004 (first entry)

DE Human Protein P82912, SEQ ID NO 4990.

XX Human; pain; neuronal tissue; gene therapy;

KW spinal segmental nerve injury; chronic constriction injury; CCI;
KW spared nerve injury; SNI; Chung.

XX Homo sapiens.

XX WO2003016475-A2.

XX 27-FEB-2003.

XX PF 14-AUG-2002; 2002WO-US025765.

XX PR 14-AUG-2001; 2001US-0312147P.

XX PR 01-NOV-2001; 2001US-0346382P.

XX PR 26-NOV-2001; 2001US-033347P.

XX (GEHO) GEN HOSPITAL CORP.

XX (FARB) BAYER AG.

XX Woolf C, D'urso D, Befort K, Coetigan M;

XX WPI; 2003-268312/26.

XX GENBANK; P82912.

XX New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.

XX Claim 1; Page; 1017pp; English.

XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent

CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a human protein (shown in table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

SO Sequence 194 AA;

Query Match 100.0%; Score 25; DB 7; Length 194;
Best Local Similarity 50.0%; Pred. No. 4.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
Db 140 KQKGVH 147

RESULT 85

ABB52791 ABB52791 standard; protein; 195 AA.

XX ABB52791;

DT 11-FEB-2002 (first entry)

XX Escherichia coli polypeptide SEQ ID NO 986.

XX Escherichia coli; B2/D+A-; antiinflammatory; antibacterial;
KM immunosuppressive; extra-intestinal infection; phylogeny; meningitis;
KM systemic infection; non-diarrhoeal infection; septicaemia;
KM pyelonephritis; antibiotic resistance.

XX Escherichia coli.

OS Escherichia coli.

XX WO200166572-A2.

XX 13-SEP-2001.

XX 12-MAR-2001; 2001WO-EP003445.

XX 10-MAR-2000; 2000FR-00003145.

XX 02-FEB-2001; 2001FR-00001449.

XX (INRM) INSERM INST NAT SANTE & RECH MEDICALE.

XX Blingen E, Bonacorsi S, Clermont O, Naeisf X, Tinsley C;

XX WPI; 2001-550253/61.

XX A library of DNA fragments of Escherichia coli strains for the phylogenetic
XX determination of a given strain comprises polynucleotides of nature B2/D+
XX A-.

XX Example 6; Fig 6; 646bp; English.
XX The invention relates to a library of DNA fragments of Escherichia coli
XX strains comprising polynucleotides (ABA8577-ABA8729 and ABA85533) and
XX encoded proteins (ABB52459-ABB52919 and ABB52954-ABB53094) of nature

CC B2/D+A-. The polynucleotides have potential antiinflammatory,
CC antibacterial and immunosuppressive activity as part of pharmaceutical
CC compositions used to treat, palliate or prevent extra-intestinal E. coli
CC infections. The polypeptides are useful for determining the phylogenic
CC group of a given E. coli strain. These polypeptides can detect and treat
CC an undesired development of E. coli, particularly an extra-intestinal
CC infection that include systemic and non-diarrhoeal infections such as
CC septicemia, pyelonephritis and meningitis this is particularly
CC advantageous as bacterial resistance is increasing with the more frequent
CC use of broad spectrum antibiotics

SO Sequence 195 AA;

Query Match 100.0%; Score 25; DB 4; Length 195;
Best Local Similarity 50.0%; Pred. No. 4.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
Db 175 NQRCVNH 182

RESULT 86

ABB91436 ABB91436 standard; protein; 195 AA.

XX ABB91436;

DT 31-MAY-2002 (first entry)

XX Herbicidally active polypeptide SEQ ID NO 647.

XX Herbicidal; plant; agriculture; herbicide.

XX Arabidopsis thaliana.

XX WO200210210-A2.

XX 07-FEB-2002.

XX 28-AUG-2001; 2001WO-EP009892.

XX 28-AUG-2001; 2001WO-EP009892.

XX (PARB) BAYER AG.

XX Tietjen K, Weidner M;

XX WPI; 2002-269010/31.

XX Identifying plant target proteins for herbicidally active compounds,
XX comprising aligning and comparing nucleic acid or amino acid sequences
XX from plant with nucleic acid or amino acid sequences from non-plant
XX organisms.

XX Claim 5; SEQ ID NO 647; 261bp + Sequence listing; English.

XX The invention relates to identifying target proteins (ABB90790-ABB94016)
XX for herbicidally active compounds, comprising aligning and comparing
XX nucleic acid or amino acid sequences from plant with nucleic acid or
XX amino acid sequences from non-plant organisms using suitable search
XX parameters, where plant sequences having an E-value greater by a factor
XX of 3 than the E-value of most similar non-plant sequences are selected.
XX The polypeptides or nucleic acids encoding them are useful for
XX identifying modulators. The identified modulators are useful as
XX herbicides

SO Sequence 195 AA;

Query Match 100.0%; Score 25; DB 5; Length 195;
Best Local Similarity 50.0%; Pred. No. 4.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8
:|::|:|
Db 127 FQASVYH1 134

RESULT 87
AAG81948
ID AAG81948 standard; protein; 198 AA.

XX AAG81948;

XX 03-SEP-2001 (first entry)

XX S. epidermidis open reading frame protein sequence SEQ ID NO:990.

XX Staphylococcus epidermidis SRI strain; infection; diagnosis; vaccination;

KW endocarditis.

XX Staphylococcus epidermidis.

XX WO200134809-A2.

XX 17-MAY-2001.

XX 09-NOV-2000; 2000WO-US030782.

XX 09-NOV-1999; 99US-0164258P.

XX (GLAX) GLAXO GROUP LTD.

XX Kimmerly WJ;

XX WPI; 2001-316495/33.

XX N-PSDB; AAH52798.

XX Nucleic acids encoding polypeptides from Staphylococcus epidermidis,

PT useful for vaccinating against infections, e.g. endocarditis.

PS Claim 18; Page 289; 2188pp; English.

XX AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
CC (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis. (I)
CC and (II) can have antibacterial activity and therefore can be used in
CC vaccination. The nucleic acids (I) may be used to produce the S.
CC epidermidis polypeptides (II) via the production of vectors containing
CC them which are used to produce hosts cells which express the
CC polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
CC used to vaccinate subjects and to raise antibodies against the bacteria.
CC The polypeptides may also be used to assay for other inhibitors of their
CC activity and therefore identify compounds that may be used for the
CC treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
CC AAH55090 represent specifically claimed S. epidermidis genomic DNA.
CC polynucleotide sequences from the present invention. AAH55091 to AAH55098
CC represent oligonucleotide sequences and primers which are used in the
CC exemplification of the present invention. N.B. The present invention
CC specifically claims all the polynucleotide sequences given in the
CC sequence listing of the present specification, however the sequence
CC listing only goes up to SEQ ID NO:4454 so even though sequences are given
CC in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present
CC for SEQ ID NO:4455 to 4464

XX SQ Sequence 198 AA;

Query Match 100.0%; Score 25; DB 4; Length 198;

Best Local Similarity 50.0%; Pred. No. 4.2e+03;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8
:|::|:|
Db 139 AQYAVDHI 146

RESULT 88

AAB58855
ID AAB58855 standard; protein; 200 AA.

XX AAB58855;

XX 27-MAR-2001 (first entry)

XX Breast and ovarian cancer associated antigen protein sequence SEQ ID 563.

XX Human; breast cancer; cytostatic; immunosuppressive;

KW nootropic; neuroprotective; antiviral; antiallergic; hepatotropic;

KW antidiabetic; antiinflammatory; antitumor; vulnery; anticonvulsant;

KW antibacterial; antifungal; antiparasitic; cardiac; immune disorder;

KW Addison's disease; allergy; autoimmune haemolytic anaemia;

KW autoimmune thyroiditis; diabetes mellitus; Crohn's disease;

KW multiple sclerosis; rheumatoid arthritis; ulcerative colitis;

KW cardiovascular disorder; wound healing; neurological disease.

XX Homo sapiens.

XX WO20005173-A1.

XX 21-SEP-2000.

XX 08-MAR-2000; 2000WO-US005881.

XX 12-MAR-1999; 99US-0124270P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Ruben SM;

XX WPI; 2000-611515/58.

XX N-PSDB; AAF21758.

XX New human breast and ovarian cancer associated gene sequences and the

PT polypeptides encoded by these genes, useful in the prevention, treatment

PT and diagnosis of cancer, immune disorders, cardiovascular disorders and

PT neurological diseases.

PS Claim 11; Page 999; 1299pp; English.

XX Sequences AAF21614 - AAF22031 represent DNA sequences encoding human

CC proteins AAB58711 - AAB59128. The DNA and protein sequences are

CC associated with breast and ovarian cancer. Included in the invention are

CC sequences AAF22032 - AAF22040 and AAB59129 which are used in the

CC isolation and characterisation of the DNA and protein sequences of the

CC invention. The breast and ovarian cancer associated DNA, protein, agonist

CC or antagonist sequences exhibit cytostatic; immunosuppressive; nootropic;

CC neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic;

CC antiinflammatory; antitumor; anticonvulsant; antibacterial;

CC antifungal; antiparasitic and cardiac activity. The polynucleotide and

CC protein sequences are used in the diagnosis of cancer, particularly

CC breast and ovarian cancer. The nucleic acid sequences, proteins, agonists

CC and agonists may also be used in the diagnosis, prevention and treatment

CC of immune disorders e.g. Addison's disease, allergies, autoimmune

CC haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's

CC disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis;

CC cardiovascular disorders such as myocardial ischemias; wound healing;

CC neurological diseases such as cerebral anoxia and epilepsy; and

CC infectious diseases

XX SQ Sequence 200 AA;

Query Match 100.0%; Score 25; DB 3; Length 200;

Best Local Similarity 50.0%; Pred. No. 4.2e+03;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8
:|::|:|
Db 146 KQKGVYH1 153

RESULT 89
ABP41624
ID ABP41624 standard; protein: 200 AA.
XX
AC ABP41624;
XX
DT 22-AUG-2002 (first entry)
XX
DE Human ovarian antigen HAZAA64, SEQ ID NO:2756.
XX
KW Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW ovarian cancer; breast cancer; tumour; reproductive system disorder;
KW infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW PCOS; ovarian cyst; dysmenorrhea; endocrine disorder; infection;
KW inflammatory condition; immune disorder; blood disorder;
KW cardiovascular disorder; respiratory disorder; neurological disorder;
KW gastrointestinal disorder; urinary system disorder; drug screening;
KW gene therapy; chromosome mapping; forensic analysis;
KW antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW antiinflammatory; gynaecological; reproductive.
XX
OS Homo sapiens.
XX
PN MO200200677-A1.
XX
PD 03-JAN-2002.
XX
PE 07-JUN-2001; 2001WO-US018569.
XX
PR 07-JUN-2000; 2000US-0209467P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
PI Birse CE, Rosen CA;
PT WPI: 2002-147878/19.
DR N-PSDB; ABQ54701.
XX
PT Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian
PT cancer), immune disorders, cardiovascular disorders and neurological
PT diseases.
XX
PS Claim 11; SEQ ID NO 2756; 2922bp; English.
XX
CC The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC ABP41328) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC encompasses polypeptides 90% identical and polynucleotides 95% identical
CC to the sequences of the invention. The invention additionally relates to
CC recombinant vectors and host cells comprising human ovarian antigen
CC polynucleotides, antibodies against human ovarian antigens, and the use
CC of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC treating, prognosing or preventing various ovary and/or breast-related
CC disorders. Such conditions include ovarian cancer and breast cancer, and
CC metastatic tumours of ovarian or breast origin, reproductive system
CC disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC polycystic ovary syndrome, ovarian cysts, and dysmenorrhea), endocrine
CC disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC vaginitis), immune disorders (e.g., congenital and acquired
CC immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC respiratory disorders, neurological disorders, gastrointestinal disorders
CC and urinary system disorders. Ovarian antigen polypeptides and
CC polynucleotides may also be used in screening for compounds which
CC modulate ovarian antigen expression or activity. The polynucleotides may
CC further be used for gene therapy, chromosome mapping, in the
CC identification of individuals and in forensic analysis, and the
CC polypeptides may be used as food additives or to prepare antibodies
CC useful in disease diagnosis, drug targeting and phenotyping. The present
CC sequence represents a human ovarian antigen of the invention. Note: The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence: 200 AA;
XX
Query Match 100.0%; Score 25; DB 5; Length 200;
Best Local Similarity 50.0%; Pred. No. 4.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
CY 1 KXXVXHI 8
DB 146 KQKGVHI 153
XX
RESULT 90
ID ADE47730 standard; protein: 202 AA.
XX
AC ADE47730;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human NOV29b protein SEQ ID NO:92.
XX
KW human; cardiac; antiarteriosclerotic; hypotensive; immunosuppressive;
KW dermatological; anorectic; cytostatic; antidiabetic; haemostatic;
KW anti-HIV; antiaesthetic; antibacterial; virucide; neuroprotective;
KW nootropic; antiparkinsonian; antihypemic; gene therapy; vaccine.
XX
OS Homo sapiens.
XX
PN MO2003076642-A2.
XX
PD 18-SEP-2003.
XX
PE 02-AUG-2002; 2002WO-US024459.
XX
PR 02-AUG-2001; 2001US-0309501P.
PR 03-AUG-2001; 2001US-0310291P.
PR 08-AUG-2001; 2001US-0310951P.
PR 09-AUG-2001; 2001US-0311292P.
PR 13-AUG-2001; 2001US-0311799P.
PR 14-AUG-2001; 2001US-0312203P.
PR 17-AUG-2001; 2001US-0313156P.
PR 17-AUG-2001; 2001US-0313201P.
PR 20-AUG-2001; 2001US-0313702P.
PR 21-AUG-2001; 2001US-0314031P.
PR 23-AUG-2001; 2001US-0314466P.
PR 28-AUG-2001; 2001US-0315403P.
PR 29-AUG-2001; 2001US-0315853P.
PR 31-AUG-2001; 2001US-0316508P.
PR 21-SEP-2001; 2001US-0323936P.
PR 03-DEC-2001; 2001US-0334078P.
PR 05-FEB-2002; 2002US-0354655P.
PR 05-MAR-2002; 2002US-0361764P.
PR 19-APR-2002; 2002US-0373825P.
PR 15-MAY-2002; 2002US-0380971P.
PR 15-MAY-2002; 2002US-0380980P.
PR 16-MAY-2002; 2002US-0381039P.
PR 28-MAY-2002; 2002US-0383761P.
PR 29-MAY-2002; 2002US-0383887P.
PR 01-AUG-2002; 2002US-00210130.
XX
PA (CURA-) CURAGEN CORP.
XX
PI zerhuen BD, Patturajan M, Kekuda R, Miller CE, Rieger DK;
PI Pena CBA, Shinkete RA, Li L, Berghs C, Zhong M, Casman SJ, Voss EZ;
PI Boidog FL, Padigaru M, Smithson G, Shenoy SG, Ji W, Gorman L;
PI Verne C, Leite MM, Guo X, Anderson DW, Spytek KA, Gerlach VL;
PI Burgess CE, Khramsov NV, Ort T, Ellerman K, Raetelli L, Agee M;
PI Chaudhuri A, Chant JS, Dippio VA, Edinger SR, Eisen A, Gangoli EA;
PI Gioc L, Ooi CE, Rothenberg ME, Spaderna SK, Hjalte T, Liu X;
PI Taupier RJ, Catterton E;

DR WPI; 2003-779062/73.
DR N-PSDB; ADE47729.
XX
PT New NOVX polypeptides and nucleic acids, useful for preventing or
PT treating NOVX-associated disorders, e.g. cancer, diabetes, tissue typing
PT atherosclerosis, asthma or AIDS, and in chromosome mapping, tissue typing
PT or pharmacogenomics.
XX
PS Claim 1; SEQ ID NO 92; 562pp; English.
XX
CC The invention relates to a novel (NOVX) human polypeptide. A polypeptide
CC of the invention has cardiant, antiarteriosclerotic, hypotensive,
CC immunosuppressive, dermatological, anorectic, cytostatic, antidiabetic,
CC haemostatic, anti-HIV, antischismatic, antibacterial, virucide,
CC neuroprotective, nootropic, antiparkinsonian, and antilipemic activity.
CC A polynucleotide encoding a polypeptide of the invention may have a use
CC in gene therapy, and as a vaccine. A polypeptide of the invention is
CC useful in the manufacture of a medicament for treating a syndrome
CC associated with a human disease, the disease selected from a pathology
CC associated with the polypeptide. These may also be used in diagnosing,
CC treating or preventing NOVX-associated disorders such as cardiomyopathy,
CC atherosclerosis, hypertension, scleroderma, obesity, cancer, diabetes,
CC hemophilia, graft-versus-host disease, AIDS, asthma, Crohn's disease,
CC multiple sclerosis, infections, anorexia, cancer-associated cachexia,
CC neurodegenerative disorders (e.g. Alzheimer's disease or Parkinson's
CC disease), haematopoietic disorders, dyslipidaemias and other wasting
CC disorders associated with chronic diseases. The nucleic acids are also
CC used as hybridisation probes, in chromosome mapping, tissue typing,
CC preventive medicine, and pharmacogenomics. The polypeptides are also
CC useful as vaccines. The present sequence represents a NOVX polypeptide of
CC the invention.
XX
SQ Sequence 202 AA;
XX
Query Match 100.0%; Score 25; DB 7; Length 202;
Best Local Similarity 50.0%; Pred. No. 4.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
:|:|:|
Db 172 IQMVGHI 179
XX
RESULT 91
ABU49778
ID ABU49778 standard; protein; 206 AA.
XX
AC ABU49778;
XX
DT 19-JUN-2003 (first entry)
XX
DE Protein encoded by Prokaryotic essential gene #35305.
XX
KM Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS Yersinia pestis.
XX
PN WO200277183-A2.
XX
PD 03-OCT-2002.
XX
PF 21-MAR-2002; 2002WO-US009107.
XX
PR 21-MAR-2001; 2001US-00815242.
PR 06-SEP-2001; 2001US-00948993.
PR 25-OCT-2001; 2001US-0342923P.
PR 08-FEB-2002; 2002US-00072851.
PR 06-MAR-2002; 2002US-0362699P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW,
PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;

XX
DR WPI; 2003-029926/02.
DR N-PSDB; ACA53648.
XX
XX
PT New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids, required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX
PS Claim 25; SEQ ID NO 77702; 1766pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than *S. aureus*, *S. typhimurium*,
CC *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of
CC the target prokaryotic essential genes. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 206 AA;
XX
Query Match 100.0%; Score 25; DB 6; Length 206;
Best Local Similarity 50.0%; Pred. No. 4.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
:|:|:|
Db 47 QOMLVRIH 54
XX
RESULT 92
ABW70558
ID ABW70558 standard; protein; 207 AA.
XX
AC ABW70558;
XX
DT 20-NOV-2003 (first entry)
XX
DE Photorhabdus luminescens protein sequence #3655.
XX
KM Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
KM detection; food; gene expression; plant; animal; microorganism; toxin;
KM antibiotic; biopesticide; virulence factor; disease model; plague;
KM whooping cough.
XX
OS Photorhabdus luminescens.
XX
PN WO200294867-A2.
XX
PD 28-NOV-2002.

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XX 07-FEB-2002; 2002WO-1B003040.
PF 07-FEB-2002; 2001FR-00001659.
PR 07-FEB-2001; 2001FR-00001659.
XX (INSP ) INST PASTEUR.
PA (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI Duchaud E, Taourit S, Glaser P, Frangeul L, Kunst F, Danchin A,
PI Buchrieser C,
XX WPI; 2003-148459/14.
DR
XX Genomic sequence of Photorhabdus luminescens and encoded polypeptides,
PT useful e.g. as therapeutic antimicrobials and agricultural pesticides.
XX
XX Claim 2; SEQ ID NO 3655; 1205bp; French.
PS
XX The invention relates to the isolation of genes and their encoded
CC proteins from Photorhabdus luminescens. The isolated sequences are
CC sources of probes and primers for detecting the genome of P. luminescens
CC and related species; to study polymorphisms; for gene analysis and for
CC detection/amplification of the genes. Antibodies (Ab) raised against the
CC polypeptides encoded by the genes are used for detection/identification
CC of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that
CC carry a gene-containing vector are used to select compounds that
CC modulate, regulate, induce or inhibit expression of the genes in plants,
CC animals or microorganisms other than P. luminescens and are able to alter
CC response or sensitivity to toxins and antibiotics produced by P.
CC luminescens. Cells transformed to express the genes are useful for
CC recombinant production of the proteins, particularly toxins and
CC antibiotics useful as insecticides, bactericides and fungicides. The
CC genes, proteins, vectors containing the genes and Ab are also useful
CC therapeutically (to treat microbial infection by bacteria or fungi that
CC are sensitive to P. luminescens-encoded toxins or antibiotics) and as
CC biopesticides. Other uses of the genes and the proteins are as virulence
CC factors and for identifying targets of human diseases for which P.
CC luminescens is a model (particularly plague and whooping cough). This
CC sequence represents one of the isolated P. luminescens proteins
XX
SQ Sequence 207 AA;
Query Match 100.0%; Score 25; DB 6; Length 207;
Best Local Similarity 50.0%; Pred. No. 4.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
Db 47 EQMLVRHI 54

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XX 03-FEB-2000; 2000US-00496914.
PR 27-APR-2000; 2000US-00560875.
PR 20-JUN-2000; 2000US-00598075.
PR 19-JUL-2000; 2000US-00620325.
PR 01-SEP-2000; 2000US-00654936.
PR 15-SEP-2000; 2000US-00663561.
PR 20-OCT-2000; 2000US-00693325.
PR 30-NOV-2000; 2000US-00728422.
XX
XX (HYSE-) HYSEQ INC.
PA
XX Tang YT, Liu C, Drmanac RT, Asundi V, Zhou P, Xu C, Cao Y,
PI Ma Y, Zhao QA, Wang D, Wang J, Zhang J, Ren F, Chen R, Wang ZW,
PI Xue AJ, Yang Y, Wejberman T, Goodrich R,
XX
XX WPI; 2001-476283/51.
DR N-PSDB; AAK52339.
DR
XX Claim 20; Page 4253-4254; 6221pp; English.
PS
XX The invention relates to polynucleotides (AAK51456-AAK53435) and the
CC encoded polypeptides (AAW78323-AAW80302) that exhibit activity elating to
CC cytokine, cell proliferation or cell differentiation or which may induce
CC production of other cytokines in other cell populations. The
CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC peptide therapy. The polypeptides have various cytokine-like activities,
CC e.g. stem cell growth factor activity, haematopoiesis regulating
CC activity, tissue growth factor activity, immunomodulatory activity and
CC activin/inhibin activity and may be useful in the diagnosis and/or
CC treatment of cancer, leukemia, nervous system disorders, arthritis and
CC inflammation. Note: Records for SEQ ID NO 2110 (AAK5581), 2111
CC (AAK5582) and 3666 (AAW80020) are omitted as the relevant pages from the
CC sequence listing were missing at the time of publication
XX
SQ Sequence 209 AA;
Query Match 100.0%; Score 25; DB 4; Length 209;
Best Local Similarity 50.0%; Pred. No. 4.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
Db 72 FQGRVSHI 79

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PR 23-OCT-2000; 2000US-0242578P.
PR 27-NOV-2000; 2000US-0253625P.
PR 22-DEC-2000; 2000US-0257931P.
PR 16-FEB-2001; 2001US-0269308P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Haselbeck R, Ohlsen KU, Zykkind JW, Wall D, Trawick JD, Carr GJ;
PI Yamamoto RT, Xu HH;
XX
DR WPI; 2001-611495/70.
DR N-PSDB; AAS55485.
XX
PT New polynucleotides for the identification and development of
PT antibiotics, comprise sequences of antisense nucleic acids.
XX
PS Example 3; SEQ ID NO 13219; Sllpp; English.
XX
CC The invention relates to antisense inhibitors of genes essential to
CC prokaryotic cellular proliferation, their use in identifying the genes,
CC their use in the discovery of novel antibiotics, the essential genes
CC themselves and the encoded proteins. The prokaryotes used are Escherichia
CC coli, Staphylococcus aureus, Salmonella typhi, Klebsiella pneumoniae,
CC Pseudomonas aeruginosa and Enterococcus faecalis. The invention is also
CC useful for the identification of potential new targets for antibiotic
CC development. The antisense nucleic acids can also be used to identify
CC proteins used in proliferation, to express these proteins, and to obtain
CC antibodies capable of binding to the expressed proteins. The proteins can
CC be used to screen compounds in rational drug discovery programmes. The
CC antisense nucleic acid sequence is also useful to screen for homologous
CC nucleic acids which are required for cell proliferation in a wide variety
CC of organisms. The present sequence represents an essential prokaryotic
CC cellular proliferation protein. Note: The sequence data for this patent
CC did not form part of the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 212 AA;
XX
Query March 100.0%; Score 25; DB 4; Length 212;
Best Local Similarity 50.0%; Pred. No. 4.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
Db 22 EQFVVAHI 29
XX
RESULT 95
ABU0572
ID ABU0572 standard; protein; 212 AA.
XX
AC ABU0572;
XX
DT 23-OCT-2003 (revised)
DT 11-FEB-2003 (first entry)
XX
DE S. pneumoniae type 4 strain protein from coding region #139.
XX
KW Bacterial meningitis; pneumonia; sepsis; otitis media; ear infection;
KW antiinflammatory; antibacterial; immunostimulant; auditory; respiratory;
KW gene therapy; vaccine.
XX
OS Streptococcus pneumoniae; type 4 strain.
XX
PN WO200277021-A2.
XX
PD 03-OCT-2002.
XX
PF 27-MAR-2002; 2002WO-IB002163.
XX
PR 27-MAR-2001; 2001GB-00007658.
XX

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PA (CHIR-) CHIRON SPA.
PA (GENO-) INST GENOMIC RES.
XX
PI Maignani V, Tettelin H, Fraser C;
XX
DR WPI; 2003-040579/03.
DR N-PSDB; ABX05851.
XX
PT New proteins and nucleic acid molecules from Streptococcus pneumoniae,
PT useful as medicaments for treating or preventing a disease or infection
PT due to Streptococcus bacteria, such as pneumonia, sepsis, otitis media or
PT ear infection.
XX
PS Claim 1; SEQ ID NO 278; 56pp; English.
XX
CC The invention relates to a protein comprising or having at least 50%
CC identity to any of the 2469 amino acid sequences, identified in the
CC specification (available on a computer readable format), or its fragment,
CC expressed from 2469 of 2489 identified DNA coding regions from the
CC Streptococcus pneumoniae type 4 strain genomic sequence appearing as
CC AB556454. Also included are an antibody which binds one of the proteins,
CC treating a patient by administering the protein, DNA or antibody (in a
CC composition), a kit comprising first and second primers, which are the
CC nucleic acid cited above or fragments between nucleotides 8-100 of a
CC sequence not defined in the specification, for amplifying a target
CC sequence contained within a Streptococcus nucleic acid sequence, where
CC the first primer is substantially complementary to the target sequence
CC and the second primer is substantially complementary to the complement of
CC the target sequence, and where the parts of the primers having
CC substantial complementarity define the termini of the target sequence to
CC be amplified, assay comprising contacting a test compound with the
CC protein, and determining whether the test compound binds to the protein
CC and a Streptococcus pneumoniae bacterium, where one or more genes
CC encoding the proteins has been rendered inactive. The proteins, nucleic
CC acid molecules, antibody and compositions are useful as medicaments for
CC treating or preventing a disease or infection due to Streptococcus
CC bacteria, particularly S. pneumoniae, such as pneumonia, sepsis, otitis
CC media or ear infection. They are also useful in developing vaccines,
CC diagnostics and antibiotics. The methods are useful for identifying
CC immunodominant proteins. The present sequence is one of the 2469 proteins
CC expressed by the identified coding regions from the genomic sequence.
CC Note: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences. (Updated on 23-OCT-2003 to
CC standardise OS field)
XX
SQ Sequence 212 AA;
XX
Query Match 100.0%; Score 25; DB 6; Length 212;
Best Local Similarity 50.0%; Pred. No. 4.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
Db 22 EQFVVAHI 29
XX
RESULT 96
ABP81534
ID ABP81534 standard; protein; 212 AA.
XX
AC ABP81534;
XX
DT 04-MAR-2003 (first entry)
DT Streptococcus pneumoniae polypeptide SEQ ID NO 612.
XX
DE Streptococcus pneumoniae polypeptide SEQ ID NO 612.
XX
KW Streptococcus pneumoniae; infection; otitis media; antibacterial;
KW diagnosis; gene therapy.
XX
OS Streptococcus pneumoniae.
XX
PN WO200283855-A2.
XX

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XX 24-OCT-2002.
PD
XX
PP 12-APR-2002; 2002MO-US011524.
XX
XX 16-APR-2001; 2001US-0283948P.
PR 18-APR-2001; 2001US-0284443P.
XX
XX (AMCY) AMERICAN CYANAMID CO.
PA
PI Zagursky RJ, Masi AW, Green BA, Chakravarti DN, Russell DP;
PI Wothers JL;
XX
DR WPI: 2003-093010/08.
DR N-PSDB: AB242382.
XX
XX New Streptococcus pneumoniae polynucleotides, useful for treating or
PT preventing S. pneumoniae infections, or non-systemic diseases, e.g.
PT otitis media, which are induced or exacerbated by S. pneumoniae.
XX
PS Claim 42; Page 853-854; 1091pp; English.
XX
XX The invention relates to isolated polynucleotides (AB272147-AB242522) of
CC a Streptococcus pneumoniae genomic sequence, a fragment or degenerate
CC variant of the polynucleotide or a nucleic acid sequence 95% identical to
CC one of the polynucleotides. The S. pneumoniae polynucleotides and encoded
CC polypeptides (ABP81299-ABP81674) are useful for treating or preventing S.
CC pneumoniae infections or non-systemic diseases, e.g. otitis media, which
CC are induced or exacerbated by S. pneumoniae. These are also useful for
CC detecting S. pneumoniae in a biological sample or diagnosing S.
CC pneumoniae infection in a subject. The polynucleotides have antibacterial
CC activity and are useful in gene therapy
XX
SQ Sequence 212 AA;
Query Match 100.0%; Score 25; DB 6; Length 212;
Best Local Similarity 50.0%; Pred. No. 4.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHI 8
Db 22 EQFVVAHI 29
RESULT 97
ABU45820
ID ABU45820 standard; protein; 212 AA.
XX
XX ABU45820;
AC
XX
XX 19-JUN-2003 (first entry)
DT
XX
XX Protein encoded by prokaryotic essential gene #31347.
DE
XX
XX Antisense; prokaryotic essential gene; cell proliferation; drug design.
KM
XX
XX Streptococcus pneumoniae.
OS
XX
XX MO200277183-A2.
PN
XX
XX 03-OCT-2002.
PD
XX
XX 21-MAR-2002; 2002MO-US009107.
PP
XX
XX 21-MAR-2001; 2001US-00815242.
PR 06-SEP-2001; 2001US-00948993.
PR 25-OCT-2001; 2001US-0342923P.
PR 08-FEB-2002; 2002US-00072851.
PR 06-MAR-2002; 2002US-0362699P.
XX
XX (ELIT-) ELITRA PHARM INC.
PA
XX
PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zykkind JW;

PI Wall D, Trawick JD, Carr GT, Yamamoto R, Foreyth RA, Xu HH;
XX
XX WPI: 2003-029926/02.
DR
DR N-PSDB: ACRA49690.
XX
XX New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX
PS Claim 25; SEQ ID NO 73744; 1766pp; English.
XX
XX The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than S. aureus, S. typhimurium,
CC K. pneumoniae or P. aeruginosa. The present sequence is encoded by this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 212 AA;
Query Match 100.0%; Score 25; DB 6; Length 212;
Best Local Similarity 50.0%; Pred. No. 4.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHI 8
Db 22 EQFVVAHI 29
RESULT 98
AAG53046
ID AAG53046 standard; protein; 213 AA.
XX
XX AAG53046;
AC
XX
XX 18-OCT-2000 (first entry)
DT
XX
XX Arabidopsis thaliana protein fragment SEQ ID NO: 67499.
DE
XX
XX Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
XX termination sequence.
XX
XX Arabidopsis thaliana.
OS
XX
XX EP1033405-A2.
PN
XX
XX 06-SEP-2000.
PD

XX 25-FEB-2000; 2000EP-00301439.
PF
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123160P.
PR 09-MAR-1999; 99US-0123548P.
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PR 23-SEP-1999; 99US-0155486P.

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Best Local Similarity	50.0%;	Pred. No. 4.6e+03;		
Matches 4; Conservative	4;	Mismatches 0;	Indels 0;	Gaps 0;

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RESULT 99
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ID AAG07579 standard; protein; 213 AA

AC MAG07579;

DT 17-OCT-2000 (first entry)

DE Arabidopsis thaliana protein fragment SEQ ID NO: 4786

KM Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter
KM termination sequence.

OS Arabidopsis thaliana

PN EP1033405-A2

06-SEP-2000. PD

PF 25-FEB-2000; 2000EP-00301439.

PR 25-FEB-1999; 99US-0121825P.

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PR 07-OCT-1999; 99US-0158029P.

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PR 29-OCT-1999; 99US-0162121P.

Query Match 100.0%; Score 25; DB 3; Length 213;
Best Local Similarity 50.0%; Pred. No. 4.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8
Db 202 DDIVSHI 209

RESULT 100
ABG20132
ID ABG20132 standard; protein; 213 AA.
XX
AC ABG20132;
XX
DT 18-FEB-2002 (first entry)
XX
DE Novel human diagnostic protein #20123.
XX
KW Human; chromosome mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS Homo sapiens.
XX
PN W0200175067-A2.
XX
PD 11-OCT-2001.
XX
FP 30-MAR-2001; 2001WO-US008631.
XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR N-PSDB; AAS64319.
XX
PT New isolated polynucleotide and encoded polypeptides; useful in
diagnostics, forensics, gene mapping, identification of mutations

PT responsible for genetic disorders or other traits and to assess
PT biodiversity.

PS Claim 20; SEQ ID NO 50491; 103pp; English.

XX The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 213 AA;

SO Query Match 100.0%; Score 25; DB 4; Length 213;
Best Local Similarity 50.0%; Pred. No. 4.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XXXVXXHI 8
Db : : : : :
12 VQSCVRHI 19

RESULT 101

AA88160
ID AAR98160 standard; protein; 215 AA.

XX AAR98160;

AC

XX 16-OCT-2003 (revised)

DT 08-JAN-1997 (first entry)

XX

XX NoDB protein of Rhizobium trifolii.

DE

XX Legume exudate-inducible promoter; promoter; nod; Rhizobium; toxin;
KM insecticide; Bacillus thuringiensis; gene expression; recombinant;
KM hydrotomase; metallothionein; prolactin.

XX

XX Rhizobium leguminosarum.

OS

XX US5484718-A.

PN

XX 16-JAN-1996.

PD

XX 17-JUN-1986; 86US-00875300.

PF

XX 17-JUN-1986; 86US-00875300.

PR

XX (MYCO) MYCOGEN PLANT SCI INC.

PA

XX Djordjevic MA, Watson JM, Kuempel PL, Innes RW, Schofield PR;
PI Scott KF, Rolfe BG;
XX WPI; 1996-087064/09.

DR

XX Gene expression using legume exudate-inducible promoter - useful for
PT expressing proteins, esp. Bacillus thuringiensis toxin, on contact with
PT legume exudate.

XX Disclosure; Fig 2; 32pp; English.

PS

XX

CC Expressing foreign structural genes using a legume exudate-inducible
CC promoter comprises placing the structural gene under the control of such
CC a promoter and inserting the construct into a recombinant DNA molecule
CC comprising a nod D gene of a strain of Rhizobium. The construct is then
CC introduced into a bacterial strain in which the promoter is active and
CC the nod D gene is expressed. The bacterial strain is then combined with
CC an effective amount of a nodulation gene inducing composition effective
CC for induction of a legume exudate-inducible gene. The promoter is
CC preferably the promoter of the nod ABC or nod PG genes of Rhizobium
CC trifolii. The structural gene is preferably an insect toxin gene of
CC Bacillus thuringiensis. This sequence is the promoter region between nodB
CC and the nodXAC gene cluster in Bradyrhizobium sp. (Parasponia) ANU 289.
CC Examples of other proteins that can be usefully expressed using such
CC methods include: hydrotomase, metallothionein and prolactin. (Updated on
CC 16-OCT-2003 to standardise OS field)

XX Sequence 215 AA;

SO Query Match 100.0%; Score 25; DB 2; Length 215;
Best Local Similarity 50.0%; Pred. No. 4.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XXXVXXHI 8
Db : : : : :
109 PQVAVQHI 116

RESULT 102

ABB48908
ID ABB48908 standard; protein; 215 AA.

XX ABB48908;

AC

XX 05-FEB-2002 (first entry)

DT

XX

XX Listeria monocytogenes protein #1612.

DE

XX Antibacterial; gene therapy; vaccine; biosynthesis; biodegradation;
KM vitamin B12; bacterial infection; disease.

KM

XX Listeria monocytogenes.

OS

XX WO200177335-A2.

PN

XX 18-OCT-2001.

PD

XX 11-APR-2001; 2001WO-FR001118.

PF

XX 11-APR-2000; 2000FR-00004629.

PR

XX (INSP) INST PASTEUR.

PA

XX Buchrieser C, Frangoul E, Couve E, Rusniok C, Feihl H, Dehoux P;
PI Dussurget O, Chetoui P, Nedjari H, Glaser P, Kunst F, Cossart P;
PI Daniels J, Goebel W, Kieft J, Kuhn M, Ng B, Vazquez-Boland JA;
PI Dominguez-Bernal G, Garrido-Garcia P, Tierrez-Martinez A, Amend A;
PI Chakraborty T, Domann E, Hain T, Berche P, Charbit A, Durant L;
PI Perez-Diaz J, Baquero F, Garcia Del Portillo F, Gomez-Lopez N;
PI Maduenio E, De Pablos B, Wehland J, Kaerst U, Entian K, Hauf J;
PI Rose M, Voss H;
XX WPI; 2002-010914/01.

DR

XX

XX Genomic sequence for Listeria monocytogenes, useful e.g. for treatment
PT and prevention of Listeria and related bacterial infections, and related
PT polypeptides.

PT

XX Claim 6; SEQ ID NO 1613; 192pp; French.

PS

XX The present invention relates to the genome sequence of Listeria

CC monocytogenes EBD-e (see ABA03041). The genome sequence and fragments of
 CC it are useful for selecting probes and primers for detecting genes in L.
 CC monocytogenes and related organisms, and for studying genetic
 CC polymorphisms and other genomes. The present sequence is a protein
 CC encoded by the genome sequence of the present invention. Proteins
 CC expressed from the genome sequence are useful for raising specific
 CC antibodies, identification of L. monocytogenes and related organisms, and
 CC for biosynthesis and biodegradation, especially biosynthesis of Vitamin
 CC B12. The genome sequence and proteins encoded by it are also useful for
 CC selecting compounds that regulate gene expression and cell replication
 CC and modulate L. monocytogenes-related diseases. In addition, the genome
 CC sequence and proteins encoded by it are useful in pharmaceutical and
 CC vaccines compositions for the treatment or prevention of infections by L.
 CC monocytogenes and related organisms. Note: The sequence data for this
 CC patent did not form part of the printed specification, but was obtained
 CC in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 215 AA;
 SQ
 Query Match 100.0%; Score 25; DB 5; Length 215;
 Best Local Similarity 50.0%; Pred. No. 4.6e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHI 8
 : : : : :
 Db 187 QQVAVHHI 194
 RESULT 103
 AAW79088
 ID AAW79088 standard; protein; 216 AA.
 AC
 XX AAW79088;
 XX
 XX 11-JAN-1999 (first entry)
 DT
 XX Human secreted protein b1129_2.
 DE
 XX Secreted protein; human; bdl64_7.
 KM
 XX Homo sapiens.
 OS
 XX
 XX Key Location/Qualifiers
 PH 11
 FT /note= "predicted transmembrane domain is centered at
 FT residue 11"
 FT 36
 FT /note= "predicted transmembrane domain is centered at
 FT residue 36"
 FT 69
 FT /note= "predicted transmembrane domain is centered at
 FT residue 69"
 FT 91..103
 FT /label= Sig_peptide
 FT /note= "predicted leader/signal sequence"
 FT 100
 FT /note= "predicted transmembrane domain is centered at
 FT residue 100"
 FT 104..216
 FT /label= Mat_protein
 FT 131
 FT /note= "predicted transmembrane domain is centered at
 FT residue 131"
 FT 185
 FT /note= "predicted transmembrane domain is centered at
 FT residue 185"
 FT Domain
 FT
 XX WO9841539-A2.
 XX
 XX PD 24-SEP-1998.
 XX
 XX PF 19-MAR-1998; 98WC-US005474.

XX
 PR 19-MAR-1997; 97US-00820493.
 PR 18-MAR-1998; 98US-00040963.
 XX
 XX (GENY) GENETICS INST INC.
 XX
 PI Jacobs K, McCoy JM, Lavallie ER, Racie LA, Merberg D, Treacy M;
 PI Spaulding V, Agostino MJ;
 XX WPI: 1998-521163/44.
 DR N-PSDB; AAV61478.
 XX
 XX New polynucleotide(s) encoding secreted human proteins - derived from
 PT human foetal kidney, adult testes and adult or foetal brain CDNA
 PT libraries.
 PS
 XX Claim 14; Page 68-69; 112pp; English.
 XX
 XX This is the amino acid sequence of a novel human secreted protein,
 CC designated b1129_2. The sequence was deduced from a full-length cDNA
 CC clone (see AAV61478) obtained from a foetal kidney cDNA library. The
 CC protein shows some homology to database sequences. The invention provides
 CC cDNA clones (see AAV61477-87) from human foetal kidney, adult testes, and
 CC adult or foetal brain cDNA libraries that code for secreted proteins (see
 CC AAW79087-97). These clones are deposited as ATCC 98364. The
 CC polynucleotides and proteins are predicted to have useful biological
 CC activities which would make them suitable for treating, preventing or
 CC ameliorating medical conditions in humans and animals, although no
 CC supporting data is given. Suggested activities include nutritional,
 CC immune stimulating (e.g. as vaccines) or suppressing, hematopoiesis
 CC regulating, tissue growth, activin/inhibin, chemotactic/chemokinetic,
 CC haemostatic and chromolytic, receptor/ligand, antiinflammatory,
 CC cadherin/tumour invasion suppressor and tumour inhibition activities
 CC
 SO Sequence 216 AA;
 Query Match 100.0%; Score 25; DB 2; Length 216;
 Best Local Similarity 50.0%; Pred. No. 4.6e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHI 8
 : : : : :
 Db 165 LQLVVHI 172
 RESULT 104
 ABP61789
 ID ABP61789 standard; protein; 216 AA.
 AC
 XX ABP61789;
 XX
 DT 04-OCT-2002 (first entry)
 DT
 XX Human polypeptide SEQ ID NO 143.
 DE
 XX Human; cytostatic; antirheumatic; antiarthritic; vulnery; analgesic;
 KM antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
 KM neuroprotective; nootropic; osteopathic; haemostatic; vasotropic;
 KM anticancer; fungicide; antidiabetic; antiaesthetic; antiallergic;
 KM immunostimulant; antiparasitic; secreted protein; transmembrane protein;
 KM cytokine; cell proliferation; cell differentiation; autoimmune disease;
 KM stem cell; growth factor; nervous system disease; neuropathy;
 KM Alzheimer's disease; Parkinson's disease; Huntington's disease;
 KM osteoporosis; severe combined immunodeficiency; SCID; infection;
 KM multiple sclerosis; rheumatoid arthritis; gene therapy.
 KM
 XX Homo sapiens.
 OS
 XX
 XX US2002065394-A1.
 XX
 XX PD 30-MAY-2002.
 XX
 XX PF 22-DEC-2000; 2000US-00745763.

XX 18-MAR-1998; 98US-00040963.
 XX (JACO/) JACOBS K.
 XX (MCCO/) MCCOY J M.
 XX (LAVALL) LAVALLIE E R.
 XX (COLL/) COLLINS-RACIE L A.
 XX (EVAN/) EVANS C.
 XX (MERB/) MERBERG D.
 XX (TREAC/) TREACY M.
 XX (SPAUL/) SPAULDING V.
 XX Jacobs K, McCoy JM, Lavallie ER, Collins-Racie LA, Evans C;
 XX Merberg D, Treacy M, Spaulding V;
 XX MPI: 2002-582343/62.
 XX N-PSDB; ABQ92003.
 XX Novel secreted or transmembrane protein and polynucleotide encoding the
 XX protein, useful for diagnosis and treatment of neurological disorders,
 XX cancer, autoimmune diseases, bone disorders and lung or liver fibrosis.
 XX
 XX Claim 14; Page 92-93; 284pp; English.
 XX
 XX The invention relates to human secreted or transmembrane protein (I),
 XX their fragments and is encoded by specific complementary deoxyribonucleic
 XX acid (cDNA) inserts (II), where the protein is substantially free from
 XX other mammalian proteins. (I) are useful for preventing, treating or
 XX ameliorating a medical condition, especially immunological treatment or
 XX prevention of tumours. (I) exhibits activity relating to angiogenesis,
 XX cytokine, cell proliferation, cell differentiation, anti-inflammatory,
 XX stem cell growth factor activity and activin or inhibin-related
 XX activities. (I) can be used to manipulate stem cells in culture to give
 XX rise to neuroepithelial cells that can be used to augment or replace
 XX cells damaged by illness, autoimmune disease, accidental damage or
 XX genetic disorders. (I) induces the proliferation of neural cells and
 XX regeneration of nerve and brain tissue and is useful for the treatment of
 XX central and peripheral nervous system diseases and neuropathies, such as
 XX Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
 XX lateral sclerosis. (I) is involved in chemotactic or chemokine
 XX activity, regulation of haematopoiesis and is useful for treating myeloid
 XX or lymphoid cell disorders, platelet disorders such as thrombocytopaenia
 XX and for regeneration of bone, cartilage, tendon, ligament and/or nerve
 XX tissue growth and in tissue repair, healing of burns, incisions, ulcers,
 XX for treating osteoporosis, osteoarthritis, bone degenerative disorders or
 XX periodontal disease. (I) is also useful for gut protection or
 XX regeneration and treatment of lung or liver fibrosis, reperfusion injury
 XX in various tissues, various immune deficiencies and disorders including
 XX severe combined immunodeficiency (SCID), bacterial or fungal infections,
 XX autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,
 XX diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
 XX such as asthma or other respiratory problems. (II) is useful to express
 XX recombinant protein, as markers for tissues in which the corresponding
 XX protein is preferentially expressed and in gene therapy. The present
 XX sequence is that of a polypeptide of the invention
 XX
 XX Sequence 216 AA;
 XX
 XX Query Match 100.0%; Score 25; DB 5; Length 216;
 XX Best Local Similarity 50.0%; Pred. No. 4.6e+03;
 XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 XX 1 XXXXVXHI 8
 XX : : : : :
 XX Db 165 LQTLVHI 172
 XX
 XX RESULT 105
 XX ABU30667
 XX ID ABU30667 standard; protein, 216 AA.
 XX AC ABU30667;
 XX

DT 19-JUN-2003 (first entry)
 XX Protein, encoded by Prokaryotic essential gene #16194.
 XX
 XX Antisense; prokaryotic essential gene; cell proliferation; drug design.
 XX
 XX Haemophilus influenzae.
 XX
 XX WO200277183-A2.
 XX
 XX 03-OCT-2002.
 XX
 XX 21-MAR-2002; 2002WO-US009107.
 XX
 XX 21-MAR-2001; 2001US-00815242.
 XX 06-SEP-2001; 2001US-00948893.
 XX 25-OCT-2001; 2001US-0342923P.
 XX 08-FEB-2002; 2002US-00072851.
 XX 06-MAR-2002; 2002US-0362699P.
 XX
 XX (ELIT-) ELITRA PHARM INC.
 XX
 XX Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
 XX Wall D, Trawick JD, Carr GJ, Yamamoto R, Foreyth RA, Xu HH;
 XX MPI: 2003-029926/02.
 XX N-PSDB; ACA34537.
 XX
 XX New antisense nucleic acids, useful for identifying proteins or screening
 XX for homologous nucleic acids required for cellular proliferation to
 XX isolate candidate molecules for rational drug discovery programs.
 XX
 XX Claim 25; SEQ ID NO 58591; 1766pp; English.
 XX
 XX The invention relates to an isolated nucleic acid comprising any one of
 XX the 6213 antisense sequences given in the specification where expression
 XX of the nucleic acid inhibits proliferation of a cell. Also included are:
 XX (1) a vector comprising a promoter operably linked to the nucleic acid
 XX encoding a polypeptide whose expression is inhibited by the antisense
 XX nucleic acid; (2) a host cell containing the vector; (3) an isolated
 XX polypeptide or its fragment whose expression is inhibited by the
 XX antisense nucleic acid; (4) an antibody capable of specifically binding
 XX the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
 XX proliferation or the activity of a gene in an operon required for
 XX proliferation; (7) identifying a compound that influences the activity of
 XX the gene product or that has an activity against a biological pathway;
 XX required for proliferation, or that inhibits cellular proliferation; (8)
 XX identifying a gene required for cellular proliferation or the biological
 XX pathway in which a proliferation-required gene or its gene product lies
 XX or a gene on which the test compound that inhibits proliferation of an
 XX organism acts; (9) manufacturing an antibiotic; (10) providing a
 XX compound's activity; (11) a culture comprising strains in which the gene
 XX product is overexpressed or underexpressed; (12) determining the extent
 XX to which each of the strains is present in a culture or collection of
 XX strains; or (13) identifying the target of a compound that inhibits the
 XX proliferation of an organism. The antisense nucleic acids are useful for
 XX identifying proteins or screening for homologous nucleic acids required
 XX for cellular proliferation to isolate candidate molecules for rational
 XX drug discovery programs, or for screening homologous nucleic acids
 XX required for proliferation in cells other than *S. aureus*, *S. typhimurium*,
 XX *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of
 XX the target prokaryotic essential genes. Note: The sequence data for this
 XX patent did not form part of the printed specification, but was obtained
 XX in electronic format directly from WIPO at
 XX ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 216 AA;
 XX
 XX Query Match 100.0%; Score 25; DB 6; Length 216;
 XX Best Local Similarity 50.0%; Pred. No. 4.6e+03;
 XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 XX 1 XXXXVXHI 8
 XX

Dh :|::|:|
37 YQGEVGH1 44

RESULT 106

AAV84844
ID AAV84844 standard; protein; 217 AA.

AC AAV84844;

DT 08-AUG-2000 (first entry)

DE Protein encoded by the nodB gene.

XX Nodulation efficiency factor; Sinorhizobium meliloti USDA 1170; nodJ;

KM strain NRG 185; cut-leaf medic; nod gene; nodA; nodB; nodC; nodD; nodI;

KM nodulation factor; nodulation efficiency; Medicago lacinata;

KM nitrogen fixation; legume.

XX Sinorhizobium meliloti.

OS WO200022138-A1.

PN 20-APR-2000.

PD 13-OCT-1999; 99WO-CA000955.

PF 14-OCT-1998; 98US-0104162P.

PR (AGRI-) AGRIC & AGRI-FOOD CANADA.

XX Barran LR, Bromfield ESP, Brown DCW;

PI WPI: 2000-317991/27.

DR N-PSDB; AAA14914.

XX isolated nodulation efficiency factor for improving nitrogen fixation in

PT legumes comprising a portion of EcoRI/BamHI fragment of Sinorhizobium

PT meliloti that confers the nodulating ability.

XX Disclosure; Fig 1; 47pp; English.

XX AAAY84842-52 represent protein encoded by the 7.2 kb EcoRI/BamHI fragment

CC from Sinorhizobium meliloti USDA 1170. This fragment encoded nodulation

CC efficiency factors, and gives S. meliloti strain NRG 185 the ability to

CC nodulate at least 50% of inoculated Medicago lacinata (cut-leaf medic)

CC plants within 10 days of inoculation. The fragment contains nod genes

CC nodA, nodB, nodC, nodD, nodI, nodJ. The nodulation factors are used to

CC increase the nodulation efficiency of Sinorhizobium for Medicago

CC lacinata. The nodulation factors are also used to improve nitrogen

CC fixation in legumes

CC Sequence 217 AA;

XX Query Match 100.0%; Score 25; DB 3; Length 217;

XX Best Local Similarity 50.0%; Pred. No. 4.6e+03;

XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8

DB 110 PQAVVRH1 117

RESULT 107

ABU52145
ID ABU52145 standard; protein; 217 AA.

AC ABU52145;

DT 07-MAY-2003 (first entry)

XX Helicobacter pylori selected interacting domain (SID) protein #1489.

KM Protein-protein interaction; ulcer; selected interacting domain; SID.

XX Helicobacter pylori.

OS WO200266501-A2.

XX 29-AUG-2002.

PD 28-DEC-2001; 2001WO-EP015428.

PF 02-JAN-2001; 2001US-0259302P.

XX (HYBR-) HYBRIGENICS.

XX (INSP) INST PASTEUR.

PI Lagrain P, Rain J, Collard F, De Reuse H, Labigne A;

XX WPI: 2002-674910/72.

DR N-PSDB; ABX66890.

XX New complexes of protein-protein interactions in Helicobacter pylori,

PT useful for identifying modulating compounds for treating or preventing

PT ulcers in mammals.

XX Claim 6; Page 447; 642pp; English.

XX The invention describes a complex of protein-protein interactions in

CC Helicobacter pylori selected from 421 complexes given in the

CC specification. The complex of protein-protein interactions are useful for

CC screening for agents which modulate the interaction of proteins.

CC Modulating compounds which binds to a targeted bacterial protein may be

CC used for treating or preventing ulcers in a human or animal. This is the

CC amino acid sequence of a selected interacting domain (SID), identified

CC via protein-protein interactions. Note: Where the patent number printed

CC at the top of the pages in the specification has obscured areas of

CC protein sequence, the indexer has replaced the residue with an X to

CC represent an illegible residue

XX Sequence 217 AA;

XX Query Match 100.0%; Score 25; DB 5; Length 217;

XX Best Local Similarity 50.0%; Pred. No. 4.6e+03;

XX Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXH1 8

DB 44 RQGVVPH1 51

RESULT 108

ABU20649
ID ABU20649 standard; protein; 217 AA.

AC ABU20649;

DT 19-JUN-2003 (first entry)

XX Protein encoded by Prokaryotic essential gene #6176.

XX Antisense; prokaryotic essential gene; cell proliferation; drug design.

XX Bacteroides fragilis.

XX WO200277183-A2.

XX 03-OCT-2002.

XX 21-MAR-2002; 2002WO-US009107.

XX 21-MAR-2001; 2001US-00815242.

XX 06-SEP-2001; 2001US-00948993.

XX 25-OCT-2001; 2001US-0342923P.

XX 08-FEB-2002; 2002US-00072851.

PR 06-MAR-2002; 2002US-0362699P.
 XX (ELITRA PHARM INC.
 XX
 PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW,
 PI Mail D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH,
 XX WPI: 2003-029926/02.
 DR N-PSDB; ACR24519.
 XX
 PT New antisense nucleic acids, useful for identifying proteins or screening
 PT for homologous nucleic acids required for cellular proliferation to
 PT isolate candidate molecules for rational drug discovery programs.
 XX
 PS Claim 25; SEQ ID NO 48573; 1766pp; English.
 XX
 CC The invention relates to an isolated nucleic acid comprising any one of
 CC the 6213 antisense sequences given in the specification where expression
 CC of the nucleic acid inhibits proliferation of a cell. Also included are:
 CC (1) a vector comprising a promoter operably linked to the nucleic acid
 CC encoding a polypeptide whose expression is inhibited by the antisense
 CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
 CC polypeptide or its fragment whose expression is inhibited by the
 CC antisense nucleic acid; (4) an antibody capable of specifically binding
 CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
 CC proliferation or the activity of a gene in an operon required for
 CC proliferation; (7) identifying a compound that influences the activity of
 CC the gene product or that has an activity against a biological pathway
 CC required for proliferation, or that inhibits cellular proliferation; (8)
 CC identifying a gene required for cellular proliferation or the biological
 CC pathway in which a proliferation-required gene or its gene product lies
 CC or a gene on which the test compound that inhibits proliferation of an
 CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
 CC compound's activity; (11) a culture comprising strains in which the gene
 CC product is overexpressed or underexpressed; (12) determining the extent
 CC to which each of the strains is present in a culture or collection of
 CC strains; or (13) identifying the target of a compound that inhibits the
 CC proliferation of an organism. The antisense nucleic acids are useful for
 CC identifying proteins or screening for homologous nucleic acids required
 CC for cellular proliferation to isolate candidate molecules for rational
 CC drug discovery programs, or for screening homologous nucleic acids
 CC required for proliferation in cells other than *S. aureus*, *S. typhimurium*,
 CC *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of
 CC the target prokaryotic essential genes. Note: The sequence data for this
 CC patent did not form part of the printed specification, but was obtained
 CC in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX
 SQ Sequence 217 AA;
 Query Match 100.0%; Score 25; DB 6; Length 217;
 Best Local Similarity 50.0%; Pred. No. 4.6e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXH 8
 Db 168 SQRAVDH 175
 XX
 RESULT 109
 ABG77402
 ID ABG77402 standard; protein: 218 AA.
 XX
 AC ABG77402;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Selected Interacting Domain (SID) polypeptide #213.
 XX
 KM Yeast; selected interacting domain; SID; antifungal; cancer; cytostatic;
 KM neuroprotective; Candida infection; gene therapy;
 KM neurodegenerative disease.
 XX

OS Saccharomyces cerevisiae.
 XX
 PN WO200259255-A2.
 XX
 PD 01-AUG-2002.
 XX
 PF 25-JAN-2002; 2002WO-EP001350.
 XX
 PR 26-JAN-2001; 2001US-0264577P.
 XX
 PA (HYBR-) HYBRIGENICS.
 XX
 PI Legrain P;
 XX
 DR WPI: 2002-619165/66.
 DR N-PSDB; ABS63016.
 XX
 PT New complex between two interacting bait and prey Saccharomyces
 PT cerevisiae polypeptides, useful for preventing or treating Candida
 PT infection, cancer or neurodegenerative diseases in a mammal.
 XX
 PS Claim 6; Page 151-152; 196pp; English.
 XX
 CC The invention relates to a complex between two interacting Saccharomyces
 CC cerevisiae polypeptides, comprising two selected interacting domain (SID)
 CC polypeptides as bait and prey proteins. A pharmaceutical composition
 CC comprising the complex is useful for preventing or treating Candida
 CC infection, cancer and neurodegenerative diseases in a human or animal,
 CC preferably in a mammal. This sequence represents a SID polypeptide of the
 CC invention
 XX
 SQ Sequence 218 AA;
 Query Match 100.0%; Score 25; DB 5; Length 218;
 Best Local Similarity 50.0%; Pred. No. 4.7e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXH 8
 Db 154 QQVPVGH 161
 XX
 RESULT 110
 ABJ11304
 ID ABJ11304 standard; protein: 218 AA.
 XX
 AC ABJ11304;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Yeast selected interacting domain protein SEQ ID NO: 742.
 XX
 KM Yeast; protein-protein interaction; Selected Interacting Domain;
 KM SID (RTM); secretion yield; cancer; neurodegenerative disease; fungicide;
 KM cytostatic; neuroprotective.
 XX
 OS Saccharomyces cerevisiae.
 XX
 PN WO200266504-A2.
 XX
 PD 29-AUG-2002.
 XX
 PF 14-FEB-2002; 2002WO-EP002299.
 XX
 PR 16-FEB-2001; 2001US-0269266P.
 XX
 PA (HYBR-) HYBRIGENICS.
 XX
 PI Legrain P;
 XX
 DR WPI: 2002-674913/72.
 DR N-PSDB; ABT11621.
 XX

PT New protein-protein complexes of *Saccharomyces cerevisiae*, useful in drug
PT screening or development, for developing yeast strains with better
PT secretion yield of protein, or in gene therapy (e.g. to treat *Candida*
PT infection or cancer).
XX
PS Claim 6, Page 300; 357bp; English.
XX
CC The present invention relates to complexes between *Saccharomyces*
CC *cerevisiae* Selected Interacting Domain (SID (RTM)) proteins and coding
CC sequences. The protein complexes of *S. cerevisiae* are useful in drug
CC development, in screening drugs or agents that modulate the interaction
CC of proteins, for developing yeast strains with better secretion yield of
CC protein, and in gene therapy. The protein complexes, polypeptides and
CC polynucleotides are useful for preventing or treating *Candida* infection,
CC cancer or neurodegenerative diseases in humans or animals. The present
CC sequence is a protein of the invention
XX
SQ Sequence 218 AA;

Query Match 100.0%; Score 25; DB 5; Length 218;
Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XXXXXHI 8
: : : : :
Db 154 QQVPGHI 161

RESULT 111
AAG07578
ID AAG07578 standard; protein; 219 AA.
XX
XX AAG07578;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 4785.
XX
KM Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.
XX
XX Arabidopsis thaliana.
OS
PN BP1033405-A2.
XX
PD 06-SEP-2000.
XX
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
XX 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.

PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135533P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
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PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 28-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 219;
Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XXXVXXH 8
DB 208 DQDLVSHI 215

RESULT 112
ABBI1692
ID ABBI1692 standard; peptide; 219 AA.
XX ABBI1692;
AC
DT 11-JAN-2002 (first entry)
XX
DE Human protein Tyr phosphatase homologue, SEQ ID NO:2062.
XX
KW Human; cytokine; cell proliferation; cell differentiation; growth factor;
KW haematopoiesis regulation; tissue growth; immunomodulator; activin;
KW inhibin; chemotaxis; chemokinesis; thrombolysis; oncogenesis;
KW proliferation; metastasis; cancer; tumour; haematopoietic disorder;
KW myeloid cell disorder; lymphoid cell disorder; asthma; arthritis;
KW chronic inflammatory condition; proliferative retinopathy;
KW atherosclerosis; coronary heart disease; arterial ischaemia;
KW bone disorder; osteoporosis; vascular growth disorder;
KW tissue regeneration; wound healing; infection; immune disorder;
KW cell culture; drug screening; gene therapy; antiinflammatory;
KW antiaesthetic; antiarthritic; haemostatic; antileukosclerotic;
KW cytoskeletal; osteopathic; vasotropic; cardiant; virucide; antibacterial;
KW antifungal; vulnery; antituber.
XX
OS Homo sapiens.
XX
PN WO200157188-A2.
XX
PD 09-AUG-2001.
XX
PF 05-FEB-2001; 2001WO-US003800.
XX
PR 03-FEB-2000; 2000US-00496914.
PR 27-APR-2000; 2000US-00560875.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT;
XX
DR WPI; 2001-457740/49.
XX
DR N-PSDB; ABA08936.
XX
PT Human proteins and DNA encoding sequences useful for preventing, treating
PT or ameliorating a medical condition in a mammalian subject e.g. arthritis
XX and cancer.
XX
PS Claim 20; Page 228-229; 1963pp; English.
XX
CC Sequences ABBI0981-ABBI2330 represent 1350 novel human polypeptides, and
CC sequences ABA08225-ABA09574 represent nucleic acids encoding them. The
CC invention also relates to vectors and recombinant host cells comprising a
CC nucleotide of the invention, methods of producing the novel polypeptides,

CC antibodies against the polypeptides, methods of detecting the nucleotides
CC or polypeptides in a sample, and methods of identifying compounds which
CC bind to polypeptides of the invention. Although novel, many of the
CC polypeptides of the invention have homology to known proteins, thereby
CC giving an insight into their probable biological activities, and hence
CC potential therapeutic applications. The polypeptides of the invention may
CC have various activities, including cytokine, cell proliferation or cell
CC differentiation activities; stem cell growth factor activity;
CC haematopoietic regulatory activity; tissue growth activity;
CC immunomodulatory activity; activin- or inhibin-related activities;
CC chemotactic or chemokinetic activities; haemostatic, thrombotic or
CC thrombolytic activities; receptor or ligand activities; or may be
CC involved in oncogenesis, cancer cell proliferation or metastasis.
CC Depending on their biological activities, polypeptides and nucleotides of
CC the invention are useful for preventing, treating or ameliorating medical
CC conditions, e.g., by protein or gene therapy. Such conditions include
CC cancers, haematopoietic disorders (e.g., myeloid or lymphoid cell
CC disorders), chronic inflammatory conditions (e.g., asthma or arthritis),
CC proliferative retinopathy, atherosclerosis, coronary heart disease,
CC arterial ischaemia, bone disorders (e.g., osteoporosis), and abnormal
CC vascular growth. Polypeptides involved with tissue regeneration and
CC repair (or nucleic acids encoding them) may be used to promote wound
CC healing (e.g., of burns, incisions and ulcers), while those with
CC immunomodulatory activities may be used in the treatment of viral,
CC bacterial and fungal infections in addition to immune disorders.
CC Polypeptides with growth factor activity may be used in cell cultures to
CC promote cell growth. For example, such polypeptides may be used to
CC manipulate stem cells in culture to give rise to neuroepithelial cells
CC that can be used to augment or replace cells damaged by illness,
CC autoimmune disease or accidental damage. The polypeptides and nucleotides
CC may also be used in the diagnosis of the above conditions, and in drug
CC screening techniques. The present sequence represents a novel human
CC polypeptide of the invention

SQ Sequence 219 AA;

Query Match 100.0%; Score 25; DB 4; Length 219;

Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;Qy 1 XQXXVXKH 8
: : : : :
Db 82 FQGRVSHI 89

RESULT 113

AAM80190
ID AAM80190 standard; protein; 219 AA.

XX AAM80190;

DT 06-NOV-2001 (first entry)

DE Human protein SEQ ID NO 3836.

XX Human; cytokine; cell proliferation; cell differentiation; gene therapy;

XX vaccine; peptide therapy; stem cell growth factor; haematopoiesis;

XX tissue growth factor; immunomodulatory; cancer; leukemia;

XX nervous system disorder; arthritis; inflammation.

XX Homo sapiens.

XX WO200157190-A2.

XX 09-AUG-2001.

XX 05-FEB-2001; 2001WO-US004098.

XX 03-FEB-2000; 2000US-00496914.

XX 27-APR-2000; 2000US-00560875.

XX 20-JUN-2000; 2000US-00598075.

XX 19-JUL-2000; 2000US-00620325.

XX 01-SEP-2000; 2000US-00654936.

PR 15-SEP-2000; 2000US-00663561.
PR 20-OCT-2000; 2000US-00693325.
PR 30-NOV-2000; 2000US-00728422.
XX
XX (HYSE-) HYSEQ INC.

PI Tang YT, Liu C, Drmanac RT, Asundi V, Zhou P, Xu C, Cao Y;
PI Ma Y, Zhao QA, Wang D, Wang J, Zhang J, Ren F, Chen R, Wang ZW;
PI Xue AJ, Yang Y, Wejrtman T, Goodrich R;

XX WPI: 2001-476283/51.
DR N-PSDB; AAK53323.

XX Nucleic acids encoding polypeptides with cytokine-like activities, useful
PT in diagnosis and gene therapy.

PS Claim 20; Page 446; 6221pp; English.

XX The invention relates to polynucleotides (AAK51456-AAK53435) and the
CC encoded polypeptides (AAM78323-AAM80302) that exhibit activity relating to
CC cytokine, cell proliferation or cell differentiation or which may induce
CC production of other cytokines in other cell populations. The
CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC peptide therapy. The polypeptides have various cytokine-like activities,
CC e.g. stem cell growth factor activity, immunomodulatory activity and
CC activity, tissue growth factor activity, haematopoietic regulating
CC activin/inhibin activity and may be useful in the diagnosis and/or
CC treatment of cancer, leukemia, nervous system disorders, arthritis and
CC inflammation. Note: Records for SEQ ID NO 2110 (AAK52581), 2111
CC (AAK52582) and 3666 (AAM80020) are omitted as the relevant pages from the
CC sequence listing were missing at the time of publication

SQ Sequence 219 AA;

Query Match 100.0%; Score 25; DB 4; Length 219;

Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;Qy 1 XQXXVXKH 8
: : : : :
Db 82 FQGRVSHI 89

RESULT 114

ABG06039
ID ABG06039 standard; protein; 219 AA.

XX ABG06039;

DT 13-FEB-2002 (first entry)

DE Novel human diagnostic protein #6030.

XX Human; chromosome mapping; gene mapping; forensic;

XX food supplement; medical imaging; diagnostic; genetic disorder.

XX Homo sapiens.

XX WO200175067-A2.

XX 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US0008631.

XX 31-MAR-2000; 2000US-00540217.

XX 23-AUG-2000; 2000US-00649167.

XX (HYSE-) HYSEQ INC.

XX Drmanac RT, Liu C, Tang YT;

XX WPI: 2001-639362/73.

XX N-PSDB; AAS70226.

XX New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity.

PS Claim 20; SEQ ID NO 36398; 103bp; English.

XX The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG0010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 219 AA;

SO

Query Match 100.0%; Score 25; DB 4; Length 219;
Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHI 8
:|::|||
Db 82 FGKRVSHI 89

RESULT 115
ADA11866
ID ADA11866 standard; protein; 219 AA.
XX
AC ADA11866;
XX
DT 06-NOV-2003 (first entry)
XX
DE Human novel secreted protein associated polypeptide #136.
XX
KW cancer; inflammation; immune disorder; neurological disorder;
KW blood clotting disorder; food additive; food preservative;
KW storage capability; fat content; nutritional component; human;
KW secreted protein.
XX
OS Homo sapiens.
XX
PN US2003055236-A1.
XX
PD 20-MAR-2003.
XX
XX 14-MAR-2002; 2002US-00097065.
XX
PR 18-DEC-1997; 97US-0068006P.
PR 18-DEC-1997; 97US-0068007P.
PR 18-DEC-1997; 97US-0068008P.
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XX XX WO200265501-A2.
XX PN
XX PD 29-AUG-2002.
XX PF 28-DEC-2001; 2001WO-EP015448.
XX PR
XX PR 02-JAN-2001; 2001US-0259302P.
XX PA (HYBR-) HYBRIGENICS.
XX PA (INSP ) INST PASTEUR.
XX PI
XX PI Legrain P, Rain J, Collard F, De Reuse H, Labigne A;
XX DR WPI; 2002-674910/72.
XX N-PSDB; ABX66333.
XX PT New complexes of protein-protein interactions in Helicobacter pylori,
XX PT useful for identifying modulating compounds for treating or preventing
XX PT ulcers in mammals.
XX PS Claim 6; Page 310; 642pp; English.
XX CC The invention describes a complex of protein-protein interactions in
XX CC Helicobacter pylori selected from 421 complexes given in the
XX CC specification. The complex of protein-protein interactions are useful for
XX CC screening for agents which modulate the interaction of proteins.
XX CC Modulating compounds which binds to a targeted bacterial protein may be
XX CC used for treating or preventing ulcers in a human or animal. This is the
XX CC amino acid sequence of a selected interacting domain (SID), identified
XX CC via protein-protein interactions. Note: Where the patent number printed
XX CC at the top of the pages in the specification has obscured areas of
XX CC protein sequence, the indexer has replaced the residue with an X to
XX CC represent an illegible residue
XX SQ Sequence 220 AA;

Query Match 100.0%; Score 25; DB 5; Length 220;
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Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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XX AC ADA11720;
XX DT 06-NOV-2003 (first entry)
XX DE Human novel secreted protein, SEQ ID NO 248.
KW cancer; inflammation; immune disorder; neurological disorder;
KW blood clotting disorder; food additive; food preservative;
KW storage capability; fat content; nutritional component; human;
KW secreted protein.
OS Homo sapiens.
XX OS
XX PN US2003055236-A1.
XX PD 20-MAR-2003.
XX PF 14-MAR-2002; 2002US-00097065.
XX PR 18-DEC-1997; 97US-0068006P.
XX PR 18-DEC-1997; 97US-0068007P.
XX PR 18-DEC-1997; 97US-0068008P.
XX PR 18-DEC-1997; 97US-0068053P.

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KM	antianemic; gene therapy; cancer; proliferative disorder; hypertension;
KM	neurodegenerative disorder; osteoarthritis; graft vs host disease;
KM	cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KM	cholesterol ester storage; systemic lupus erythematosus; infection;
KM	severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KM	allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KM	bone damage; cartilage damage; antinflammatory disease; coagulation;
KM	thrombosis; contraceptive.
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XX	Homo sapiens.
XX	
PN	WO200058473-A2.
XX	
PD	05-OCT-2000.
XX	
PF	31-MAR-2000; 2000WO-US008621.
XX	
PR	31-MAR-1999; 99US-0127607P.
PR	02-APR-1999; 99US-0127636P.
PR	05-APR-1999; 99US-0127728P.
PR	30-MAR-2000; 2000US-00540763.
XX	
PA	(CURA-) CURAGEN CORP.
XX	
PI	Shinkets RA, Leach M;
XX	
DR	WP1; 2000-602362/57.
DR	N-PSDB; AAC76057.
XX	
PT	Novel nucleic acids and peptides derived from open reading frame X, useful for treating e.g. cancers, proliferative disorders, neurodegenerative disorders and cardiovascular disease.
XX	
PS	Claim 11; Page 2433; 5507PP; English.
XX	
CC	AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397, which represent the human ORFX open reading frames 1 to 3161. The ORFX sequences have activities such as: cytostatic; hepatotropic; vulnery;
CC	antiproliferative; antiparkinsonian; neurotropic; neuroprotective; osteopathic;
CC	anticonvulsant; antiarthritic; immunosuppressant; immunostimulant;
CC	cardiac; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
CC	dermatological; immunosuppressive; antiinflammatory; antibacterial;
CC	antiviral; antifungal; antineumatic; antihyroid; and antianemic. The sequences can be used for determining the presence of or predisposition to, or preventing or treating pathological conditions associated with an ORFX-associated disorder. The nucleic acids can be used to express ORFX proteins in gene therapy vectors. The proteins and nucleic acids may be used to treat cancers, proliferative disorders, neurodegenerative disorders, osteoarthritis, graft vs host disease, cardiovascular disease, diabetes mellitus, hypertension, hypothyroidism, cholesterol ester storage, systemic lupus erythematosus, severe combined immunodeficiency (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune disorders, asthma, allergies, aplastic anemia, burns, wounds, bone and cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to enhance coagulation; to inhibit thrombosis; and as a contraceptive
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Best Local Similarity	50.0%; Pred. No. 4.8e+03;
Matches	4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
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DB	120 LQIRVGH 127
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AA	AAG18324;
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KW	hybridisation assay; genetic mapping; gene expression control; promoter;		PR	23-JUN-1999;	99US-0140353P.
KW	termination sequence.		PR	23-JUN-1999;	99US-0140685P.
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PR	18-JUN-1999;	99US-0139455P.	PR	16-AUG-1999;	99US-0149368P.
PR	18-JUN-1999;	99US-0139456P.	PR	17-AUG-1999;	99US-0149175P.
PR	18-JUN-1999;	99US-0139457P.	PR	18-AUG-1999;	99US-0149426P.
PR	18-JUN-1999;	99US-0139458P.	PR	20-AUG-1999;	99US-0149722P.
PR	18-JUN-1999;	99US-0139459P.	PR	20-AUG-1999;	99US-0149723P.
PR	18-JUN-1999;	99US-0139460P.	PR	20-AUG-1999;	99US-0149929P.
PR	18-JUN-1999;	99US-0139461P.	PR	23-AUG-1999;	99US-0149930P.
PR	18-JUN-1999;	99US-0139462P.	PR	23-AUG-1999;	99US-0149930P.
PR	18-JUN-1999;	99US-0139463P.	PR	25-AUG-1999;	99US-0150566P.
PR	18-JUN-1999;	99US-0139750P.	PR	26-AUG-1999;	99US-0150884P.
PR			PR	27-AUG-1999;	99US-0151065P.

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PR 27-AUG-1999; 99US-0151066P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154038P.
PR 20-SEP-1999; 99US-0154779P.
PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156450P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
PR 05-OCT-1999; 99US-0157753P.
PR 06-OCT-1999; 99US-0157865P.
PR 07-OCT-1999; 99US-0158029P.
PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
PR 13-OCT-1999; 99US-0159294P.
PR 14-OCT-1999; 99US-0159329P.
PR 14-OCT-1999; 99US-0159330P.
PR 14-OCT-1999; 99US-0159331P.
PR 14-OCT-1999; 99US-0159637P.
PR 14-OCT-1999; 99US-0159638P.
PR 18-OCT-1999; 99US-0159584P.
PR 21-OCT-1999; 99US-0160741P.
PR 21-OCT-1999; 99US-0160767P.
PR 21-OCT-1999; 99US-0160768P.
PR 21-OCT-1999; 99US-0160770P.
PR 21-OCT-1999; 99US-0160815P.
PR 21-OCT-1999; 99US-0160816P.
PR 22-OCT-1999; 99US-0160980P.
PR 22-OCT-1999; 99US-0160981P.
PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161922P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

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Query Match 100.0%; Score 25; DB 3; Length 224;
Best Local Similarity 50.0%; Pred. No. 4.8e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Cy 1 QXXVXHXI 8
Db 181 SQKRVNHI 188

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RESULT 121
AAB42807
ID AAB42807 standard; protein; 227 AA.
AC AAB42807;
AC AAB42807;
DT 08-FEB-2001 (first entry)
DB Human ORFX ORF2571 polypeptide sequence SEQ ID NO:5142.
XX
XX Human, open reading frame; ORFX; detection; cytosolic; hepatocrotropic;
XX Human, antiparallel; antiparallel; antiparallel; antiparallel;
XX anticonvulsant; osteopathic; antitarrhritic; immunosuppressant; cardiant;

```

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KW Immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
KW hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW antiviral; antibacterial; antifungal; antihemetic; antithyroid;
KW antianemic; gene therapy; cancer; proliferative disorder; hypertension;
KW neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW cholesterol ester storage; systemic lupus erythematosus; infection;
KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW thrombosis; contraceptive.
XX
XX Homo sapiens.
XX
XX WO200058473-A2.
XX
XX 05-OCT-2000.
XX
XX 31-MAR-2000; 2000WO-US008621.
XX
XX 31-MAR-1999; 99US-0127607P.
XX 02-APR-1999; 99US-0127636P.
XX 05-APR-1999; 99US-0127728P.
XX 30-MAR-2000; 2000US-00540763.
XX
XX (CURA-) CURAGEN CORP.
XX
XX Shinketsu RA, Leach M;
XX
XX WPI; 2000-602362/57.
XX N-PSDB; AAC77016.
XX
XX Novel nucleic acids and peptides derived from open reading frame X,
XX useful for treating e.g. cancers, proliferative disorders,
XX neurodegenerative disorders and cardiovascular disease.
XX
XX Claim 11; Page 4326; 5507pp; English.
XX
XX AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
XX which represent the human ORFX open reading frames 1 to 3161. The ORFX
XX sequences have activities such as: cytosolic; hepatocrotropic; vulnary;
XX antiparallel; antiparallel; antiparallel; antiparallel; antiparallel;
XX anticonvulsant; antitarrhritic; immunosuppressant; immunostimulant;
XX cardiac; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
XX dermatological; immunosuppressive; antiinflammatory; antibacterial;
XX antiviral; antifungal; antihemetic; antithyroid; and antianemic. The
XX sequences can be used for determining the presence of or predisposition
XX to, or preventing or treating pathological conditions associated with an
XX ORFX-associated disorder. The nucleic acids can be used to express ORFX
XX proteins in gene therapy vectors. The proteins and nucleic acids may be
XX used to treat cancers, proliferative disorders, neurodegenerative
XX disorders, osteoarthritis, graft vs host disease, cardiovascular disease,
XX diabetes mellitus, hypertension, hypothyroidism, cholesterol ester
XX storage, systemic lupus erythematosus, severe combined immunodeficiency
XX (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune
XX disorder, asthma, allergies, aplastic anaemia, burns, wounds, bone and
XX cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to
XX enhance coagulation; to inhibit thrombosis; and as a contraceptive
XX
XX Sequence 227 AA;

```

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Query Match 100.0%; Score 25; DB 3; Length 227;
Best Local Similarity 50.0%; Pred. No. 4.9e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Cy 1 QXXVXHXI 8
Db 148 IQTYVXHI 155

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RESULT 122
AAB61466
ID AAB61466 standard; protein; 228 AA.

```

XX ABB61466;
AC
XX 26-MAR-2002 (first entry)
DT
XX Drosophila melanogaster polypeptide SEQ ID NO 11190.
DE
XX Drosophila; developmental biology; cell signalling; insecticide;
KM pharmaceutical.
XX
OS Drosophila melanogaster.
PN WO200171042-A2.
XX
PD 27-SEP-2001.
XX
PF 23-MAR-2001; 2001WO-US009231.
XX
PR 23-MAR-2000; 2000US-0191637P.
PR 11-JUL-2000; 2000US-00614150.
XX
PA (PEKE) PE CORP NY.
XX
PI Venter JC, Adams M, Li PWD, Myers EW;
PI WPI; 2001-656860/75.
DR N-PSDB; ABL05569.
XX
XX New isolated nucleic acid detection reagent for detecting 1000 or more
PT genes from Drosophila and for elucidating cell signaling and cell-cell
PT interactions.
XX
PS Disclosure; SEQ ID NO 11190; 21pp + Sequence Listing; English.
XX
CC The invention relates to an isolated nucleic acid detection reagent
CC capable of detecting 1000 or more genes from Drosophila. The invention is
CC useful in developmental biology and in elucidating cell signalling and
CC cell-cell interactions in higher eukaryotes for the development of
CC insecticides, therapeutics and pharmaceutical drugs. The invention
CC discloses genomic DNA sequences (AB116176-AB130511), expressed DNA
CC sequences (AB101840-AB116175) and the encoded proteins (ABBS7737-
CC ABBS72072). The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 228 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 228;
Best Local Similarity 50.0%; Pred. No. 4.9e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 X0XXVXHI 8
Db 139 IQAAVTHI 146
XX
RESULT 123
AAV27341
ID AAV27341 standard; protein: 229 AA.
XX
AC AAV27341;
XX
DT 15-NOV-1999 (first entry)
XX
DE Group B Streptococcus (GBS) antigen (clone 2).
XX
XX Group B Streptococcus; GBS; antigen; vaccine; Streptococcus infection;
KM sepsis; meningitis; pneumonia; immunocompromise; diabetes; liver disease;
KM cancer; veterinary; mastitis.
XX
OS Streptococcus sp.
XX
PN WO9942588-A2.
XX

XX 26-AUG-1999.
PD
XX 17-FEB-1999; 99MO-CA000114.
PF
XX 20-FEB-1998; 98US-0075425P.
PR
XX (BIOC-) BIOCHEM VACCINS INC.
PA
XX Brodeur BR, Rioux C, Boyer M, Charlebois I, Hamel J, Martin D;
PI WPI; 1999-540309/45.
DR N-PSDB; AAX91104.
XX
XX Novel group B Streptococcus antigens - useful as vaccine compositions for
PT prophylaxis or therapy of Streptococcus infections.
PT
PS Claim 26; Fig 2B; 154pp; English.
XX
XX The invention provides Group B Streptococcus (GBS) antigens (AAV27336-
CC 370) and nucleic acids (AAX91103-X91111) encoding the antigens. The GBS
CC antigens can be recombinantly expressed using standard recombinant
CC methodology. The GBS antigens of the invention can be used as vaccine
CC components for the treatment or prophylaxis of diseases and symptoms
CC mediated by Streptococcus infection, especially group A Streptococcus (S.
CC pyogenes), GBS or S. agalactiae, S. dysgalactiae, S. uberis, S. norcardia,
CC as well as Staphylococcus aureus. The vaccines are administered to those
CC individuals at risk of GBS infection, particularly pregnant women and
CC infants for sepsis, meningitis, and pneumonia, as well as
CC immunocompromised individuals, such as those with diabetes, liver disease
CC or cancer. The vaccines also have veterinary applications, such as for the
CC treatment of mastitis in cattle. The present sequence represents a GBS
CC antigen of the invention
XX
SQ Sequence 229 AA;
XX
Query Match 100.0%; Score 25; DB 2; Length 229;
Best Local Similarity 50.0%; Pred. No. 4.9e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 X0XXVXHI 8
Db 111 F0KDVHII 118
XX
RESULT 124
ABU20679
ID ABU20679 standard; protein: 233 AA.
XX
AC ABU20679;
XX
DT 19-JUN-2003 (first entry)
XX
DE Protein encoded by prokaryotic essential gene #6706.
XX
KM Antisense; prokaryotic essential gene; cell proliferation; drug design.
KM Bacteroides fragilis.
XX
OS
PN WO200277183-A2.
XX
PD 03-OCT-2002.
XX
PF 21-MAR-2002; 2002WO-US009107.
XX
PR 21-MAR-2001; 2001US-00815242.
PR 06-SEP-2001; 2001US-00948993.
PR 25-OCT-2001; 2001US-0342923P.
PR 08-FEB-2002; 2002US-00072851.
PR 06-MAR-2002; 2002US-0362699P.
XX
XX (ELIT-) ELITRA PHARM INC.
PA
XX

PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX MPI: 2003-029926/02.
DR N-PSDB; ACN24549.
XX
PT New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX
PS Claim 25; SEQ ID NO 48603; 1766pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than *S. aureus*, *S. typhimurium*,
CC *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of
CC the target prokaryotic essential genes. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 233 AA;
Query Match 100.0%; Score 25; DB 6; Length 233;
Best Local Similarity 50.0%; Pred. No. 5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
: : : : :
Db 221 EQGAVXHI 228

RESULT 125
ABM67953
ID ABM67953 standard; protein; 234 AA.
XX
XX ABM67953;
XX
XX 20-NOV-2003 (first entry)
XX
XX Photorhabdus luminescens protein sequence #1050.
XX
XX Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
XX detection; food; gene expression; plant; animal; microorganism; toxin;
XX antibiotic; biopesticide; virulence factor; disease model; plague;
XX whooping cough.
XX
XX Photorhabdus luminescens.
XX
XX
XX MO200294867-A2.

XX
PD 28-NOV-2002.
XX
XX 07-FEB-2002; 2002MO-IB003040.
XX
XX 07-FEB-2001; 2001FR-00001659.
XX
XX (INSP) INST PASTEUR.
XX (CNRS) CNRS CENT NAT RECH SCI.
XX
PI Duchaud E, Taourit S, Glaeser P, Frangeul L, Kunst F, Danchin A;
PI Buchrieser C;
XX
XX MPI: 2003-148459/14.
XX
XX Genomic sequence of Photorhabdus luminescens and encoded polypeptides,
XX useful e.g. as therapeutic antimicrobials and agricultural pesticides.
XX
PS Claim 2; SEQ ID NO 1050; 1205pp; French.
XX
CC The invention relates to the isolation of genes and their encoded
CC proteins from Photorhabdus luminescens. The isolated sequences are
CC sources of probes and primers for detecting the genome of *P. luminescens*
CC and related species; to study polymorphisms; for gene analysis and for
CC detection/amplification of the genes. Antibodies (Ab) raised against the
CC polypeptides encoded by the genes are used for detection/identification
CC of *P. luminescens*, e.g. in foods. The genes, proteins, Ab and cells that
CC carry a gene-containing vector are used to select compounds that
CC modulate, regulate, induce or inhibit expression of the genes in plants,
CC animals or microorganisms other than *P. luminescens* and are able to alter
CC response or sensitivity to toxins and antibiotics produced by *P.*
CC luminescens. Cells transformed to express the genes are useful for
CC recombinant production of the proteins, particularly toxins and
CC antibiotics useful as insecticides, bactericides and fungicides. The
CC genes, proteins, vectors containing the genes and Ab are also useful
CC therapeutically (to treat microbial infection by bacteria or fungi that
CC are sensitive to *P. luminescens*-encoded toxins or antibiotics) and as
CC biopesticides. Other uses of the genes and the proteins are as virulence
CC factors and for identifying targets of human diseases for which *P.*
CC luminescens is a model (particularly plague and whooping cough). This
CC sequence represents one of the isolated *P. luminescens* proteins
XX
SQ Sequence 234 AA;
Query Match 100.0%; Score 25; DB 6; Length 234;
Best Local Similarity 50.0%; Pred. No. 5.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
: : : : :
Db 157 QQVWVXHI 164

RESULT 126
ABP39305
ID ABP39305 standard; protein; 235 AA.
XX
XX ABP39305;
XX
XX 24-JUL-2002 (first entry)
XX
XX *Staphylococcus epidermidis* ORF amino acid sequence SEQ ID NO:4150.
XX
XX *Staphylococcus epidermidis*; open reading frame; ORF; bacterial infection;
XX antibacterial; gene therapy.
XX
XX *Staphylococcus epidermidis*.
XX
XX US6380370-B1.
XX
XX 30-APR-2002.
XX
XX 13-AUG-1998; 98US-00134001.

XX 14-AUG-1997; 97US-0055779P.
PR 08-NOV-1997; 97US-0064964P.
XX (GENO-) GENOME THERAPEUTICS CORP.
XX Doucette-Stamm LA, Bush D;
XX WPI; 2002-381255/41.
DR N-PSDB; ABB91850.
XX
PT Novel isolated nucleic acid encoding a Staphylococcus epidermidis
PT polypeptide, useful for diagnosing and treating bacterial infections.
XX
PS Disclosure; SEQ ID NO 4150; 267P; English.
XX
CC ABB90538 to ABB93374 represent Staphylococcus epidermidis open reading
CC frame (ORF) nucleic acid sequences which encode the amino acid sequences
CC given in ABB95124 to ABB97960. The S. epidermidis sequences have
CC antibacterial activity and can be used in gene therapy. The sequences can
CC also be used in the diagnosis and treatment of bacterial infections,
CC particularly S. epidermidis infections. The sequences can be used to
CC screen for compounds able to interfere with the S. epidermidis life cycle
CC or inhibit S. epidermidis infection. N.B. The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from the USPTO web site
XX
SQ Sequence 235 AA;

Query Match 100.0%; Score 25; DB 5; Length 235;
Best Local Similarity 50.0%; Pred. No. 5.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8
:|::|::|
Db 176 AQYAVDHI 183

RESULT 127
ID ABB67392 standard; protein; 238 AA.
XX ABB67392;

AC ABB67392;
XX
DT 26-MAR-2002 (first entry)
XX

DE Drosophila melanogaster polypeptide SEQ ID NO 28968.
XX

KW Drosophila; developmental biology; cell signalling; insecticide;
KM pharmaceutical.
XX

OS Drosophila melanogaster.
XX

PN WO200171042-A2.
XX

PD 27-SEP-2001.
XX

PF 23-MAR-2001; 2001WO-US009221.
XX

PR 23-MAR-2000; 2000US-0191637P.
PR 11-JUL-2000; 2000US-00614150.
XX

PA (PEKE) PE CORP NY.
XX

PI Venter JC, Adams M, Li PWD, Myers EW;
XX

DR WPI; 2001-656860/75.
XX

DR N-PSDB; ABL11495.
XX

PT New isolated nucleic acid detection reagent for detecting 1000 or more
PT genes from Drosophila and for elucidating cell signalling and cell-cell
PT interactions.
XX

PS Disclosure; SEQ ID NO 28968; 21P + Sequence Listing; English.
XX
CC The invention relates to an isolated nucleic acid detection reagent
CC capable of detecting 1000 or more genes from Drosophila. The invention is
CC useful in developmental biology and in elucidating cell signalling and
CC cell-cell interactions in higher eukaryotes for the development of
CC insecticides, therapeutics and pharmaceutical drugs. The invention
CC discloses genomic DNA sequences (AB16176-AB130511), expressed DNA
CC sequences (AB101840-AB116175) and the encoded proteins (ABB57737-
CC ABB72072). The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 238 AA;

Query Match 100.0%; Score 25; DB 4; Length 238;
Best Local Similarity 50.0%; Pred. No. 5.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8
:|::|::|
Db 86 AQFHVPHI 93

RESULT 128
ID AAU25571 standard; protein; 239 AA.
XX AAU25571;
XX

DT 18-DEC-2001 (first entry)
XX

DE Human G Protein-Coupled Receptor (GPCR) polypeptide #18.
XX

KW Human; G-protein coupled receptor; GPCR; mental disorder; schizophrenia;
KM attention deficit disorder; anxiety; depression; bipolar disorder;
KM neurological disorder; Huntington's disease; dementia; obesity; anorexia;
KM metabolic disorder; Parkinson's disease; Tourette's syndrome; thrombosis;
KM type 2 diabetes; cardiovascular disorder; myocardial infarction; cancer;
KM cardiomyopathy; atherosclerosis; human immunodeficiency virus; HIV;
KM viral infection; immunostimulant; neuroleptic; nootropic; tranquiliser;
KM antidepressant; anorectic; gene therapy.
XX

OS Homo sapiens.
XX

PN WO200162797-A2.
XX

PD 30-AUG-2001.
XX

PF 23-FEB-2001; 2001WO-US005676.
XX

PR 23-FEB-2000; 2000US-0184247P.
PR 23-FEB-2000; 2000US-0184303P.
PR 23-FEB-2000; 2000US-0184304P.
PR 23-FEB-2000; 2000US-0184305P.
PR 23-FEB-2000; 2000US-0184397P.
PR 02-MAR-2000; 2000US-0186457P.
PR 03-MAR-2000; 2000US-0186810P.
PR 09-MAR-2000; 2000US-0188064P.
PR 13-MAR-2000; 2000US-0188880P.
PR 03-APR-2000; 2000US-0194344P.
PR 23-JUN-2000; 2000US-0213861P.
PR 11-JUL-2000; 2000US-0217369P.
PR 11-JUL-2000; 2000US-0217370P.
PR 14-JUL-2000; 2000US-0218337P.
PR 20-JUL-2000; 2000US-0218492P.
XX

PA (PHAA) PHARMACIA & UPJOHN CO.
XX

PI Vogel G, Wood LS, Parodi LA, Lind P;
XX

DR WPI; 2001-570628/64.
XX

DR N-PSDB; AAS42823.
XX

XX New isolated nucleic acid encoding a new G-protein coupled receptor
 PT polypeptide for detecting receptor modulators that can treat mental
 PT disorders, such as schizophrenia, anxiety, depression, or obesity.
 XX
 XX Claim 35; Page 77; 279pp; English.
 CC Sequences AAU25554-AAU25616 represent human G-protein coupled receptor
 CC (GPCR) polypeptides of the invention. The proteins and their associated
 CC DNA sequences can be used to identify compounds which bind to GPCR
 CC polypeptides and in screening for compounds that modulate GPCR activity.
 CC By screening a human subject for the presence of mutations in GPCR DNA, a
 CC GPCR-related disorder or a genetic predisposition can be diagnosed. The
 CC sequences can also be used for treatment and prevention of mental
 CC disorders such as schizophrenia, attention deficit disorder, anxiety,
 CC depression, dementia and bipolar disorder, neurological disorders such as
 CC Huntington's disease, Parkinson's disease and Tourette's syndrome,
 CC metabolic disorders such as obesity, anorexia and type 2 diabetes,
 CC cardiovascular disorders such as thrombosis, myocardial infarction,
 CC cardiomyopathy and atherosclerosis, viral infections caused by HIV and
 CC cancers
 XX
 SQ Sequence 239 AA;
 Query Match 100.0%; Score 25; DB 4; Length 239;
 Best Local Similarity 50.0%; Pred. No. 5.2e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHI 8
 Db 116 SQGQVIRH 123
 RESULT 129
 AAU14717
 ID AAU14717 standard; protein; 239 AA.
 XX
 AC AAU14717;
 DT 24-OCT-2001 (first entry)
 XX
 DE Novel bone marrow polypeptide #116.
 XX
 KW Bone marrow; diagnostic; therapeutic; gene therapy; antigenic;
 KW hematopoiesis; myeloid; lymph cell disorder; tissue regeneration;
 KW wound healing; nutritional supplement; immune disorder;
 KW severe combined immunodeficiency; SCID.
 XX
 OS Homo sapiens.
 XX
 PN WO200157187-A2.
 XX
 PD 09-AUG-2001.
 XX
 PF 05-FEB-2001; 2001WO-US003782.
 XX
 PR 03-FEB-2000; 2000US-00496914.
 PR 20-JUN-2000; 2000US-00598075.
 PR 19-JUL-2000; 2000US-00620325.
 PR 30-NOV-2000; 2000US-0250683P.
 XX
 PA (HSEB-) HYSEQ INC.
 XX
 PI Ford JE, Boyle BJ, Tang YT, Liu C, Asundi V, Zhou P, Xue AJ,
 PI Ren F, Drmanac RT;
 XX
 DR WPI; 2001-488875/53.
 DR N-PSDB; AAS23022.
 XX
 PT Nucleic acids encoding bone marrow polypeptides, useful in diagnostic and
 PT gene therapy.
 XX
 PS Claim 10; Page 129; 392pp; English.

XX AAU14602-AAU14794 represent novel bone marrow polypeptides of the
 CC invention. The proteins and corresponding coding sequences may be used in
 CC the prevention, diagnosis and treatment of diseases associated with
 CC inappropriate bone marrow polypeptide expression. For example, to treat
 CC disorders associated with decreased expression by rectifying mutations or
 CC deletions in a patient's genome that affect the activity of the
 CC polypeptides by expressing inactive proteins or to supplement the
 CC patient's own production of the polypeptide. Additionally, the nucleic
 CC acids may be used to produce the polypeptides, by inserting the nucleic
 CC acids into a host cell and culturing the cell to express the protein. The
 CC nucleic acid and its complementary sequences may also be used as DNA
 CC probes in diagnostic assays to detect and quantitate the presence of
 CC similar nucleic acid sequences in samples, and therefore which patients
 CC may be in need of restorative therapy. The proteins may also be used as
 CC antigens in the production of antibodies against bone marrow proteins and
 CC in assays to identify modulators of their expression and activity. The
 CC anti-bone marrow protein antibodies and antagonists may also be used to
 CC down regulate expression and activity. The antibodies may also be used as
 CC diagnostic agents for detecting the presence of the protein in samples
 CC (e.g. by enzyme linked immunosorbent assay (ELISA)). The proteins may be
 CC used to regulate hematopoiesis activity, and consequently in the
 CC treatment of myeloid or lymph cell disorders; in tissue regeneration,
 CC such as wound healing; as a nutritional supplement; and in treatment of
 CC immune disorders such as severe combined immunodeficiency (SCID)
 XX
 SQ Sequence 239 AA;
 Query Match 100.0%; Score 25; DB 4; Length 239;
 Best Local Similarity 50.0%; Pred. No. 5.2e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 XQXXVXHI 8
 Db 154 EQGLVSHI 161
 RESULT 130
 AAU74333
 ID AAU74333 standard; protein; 239 AA.
 XX
 AC AAU74333;
 DT 12-MAR-2002 (first entry)
 XX
 DE Human cytoskeleton-associated protein (CYSKP) #4.
 XX
 KW Human; cytoskeleton-associated protein; CYSKP; autoimmune disorder;
 KW cell proliferative disorder; inflammatory disorder; prion disease;
 KW vesicle trafficking disorder; gastrointestinal disorder; muscle disorder;
 KW neurological disorder; cell motility disorder; reproductive disorder;
 KW spinal cord disease; central nervous system disorder; mental disorder;
 KW gene therapy; cancer.
 XX
 OS Homo sapiens.
 XX
 PN WO200185942-A2.
 XX
 PD 15-NOV-2001.
 XX
 PF 03-MAY-2001; 2001WO-US014355.
 XX
 PR 05-MAY-2000; 2000US-0201960P.
 PR 08-MAY-2000; 2000US-0202729P.
 PR 05-JUN-2000; 2000US-0209705P.
 PR 07-JUN-2000; 2000US-0210149P.
 PR 21-JUN-2000; 2000US-0213215P.
 XX
 PA (INCY-) INCYTE GENOMICS INC.
 XX
 PI Xue H, Tang YT, Au-Young J, Lu DAM, Baughn MR, Hillman JL,
 PI Azimzai V, Lal P, Yao MG, Bandman O, Burford N, Batra S, Kearney L,
 PI Policky JL;

XX WPI; 2002-062248/08.
DR N-PSDB; AAS99893.
XX
PT New cytoskeleton-associated proteins and polynucleotides, useful for
PT diagnosing, preventing and treating cell proliferative, autoimmune,
PT inflammatory, neurological, cell motility, reproductive and muscle
PT disorders.
XX
PS Claim 1; Page 129; 194pp; English.
XX
CC The invention relates to human cytoskeleton-associated polypeptides
CC (CYSKs) and their associated polynucleotide sequences. The sequences are
CC useful in the treatment of disorders associated with overexpression or
CC underexpression of CYSKP in a patient. The disorders include cell
CC proliferative disorders (such as cancer, actinic keratosis,
CC arteriosclerosis, cirrhosis, hepatitis and psoriasis),
CC autoimmune/inflammatory disorders (such as, asthma, atherosclerosis,
CC osteoporosis, Crohn's disease, rheumatoid arthritis, diabetes mellitus
CC and anaemia), vesicle trafficking disorders (such as
CC hypercholesterolaemia, diabetes insipidus, Graves' disease and goitre),
CC gastrointestinal disorders, prion diseases, neurological disorders (such
CC as epilepsy, stroke, cerebral neoplasms, Alzheimer's disease,
CC Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis
CC and other motor neuron disorders), cell motility disorders, reproductive
CC disorders (such as endometriosis and polycystic ovary syndrome), muscle
CC disorders (such as myocarditis, migraine, hypertension, hypoglycaemia,
CC myocardial infarction, epilepsy and muscular dystrophy), spinal cord
CC diseases, central nervous system disorders (such as Down syndrome and
CC cerebral palsy) and mental disorders (such as anxiety and schizophrenia).
CC Sequences AAU74330-AAU74363 represent human CYSKP of the invention
XX
SQ Sequence 239 AA;
XX
Query Match 100.0%; Score 25; DB 5; Length 239;
Best Local Similarity 50.0%; Pred. No. 5.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
Db 172 IQTVVHI 179
XX
RESULT 131
AAB94472
ID AAB94472 standard; protein: 240 AA.
XX
AC AAB94472;
XX
XX 26-JUN-2001 (first entry)
XX
DE Human protein sequence SEQ ID NO:15137.
XX
KM Human; primer: detection; diagnosis; antisense therapy; gene therapy.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
XX 07-FEB-2001.
PD
XX
XX 28-JUL-2000; 2000EP-00116126.
PF
XX
XX 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
XX
PA (HELI-) HELIX RES INST.
XX
XX Oca T, Iwogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;

XX WPI; 2001-318749/34.
DR
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 8; SEQ ID NO 15137; 2537pp + Sequence listing; English.
XX
XX
CC The present invention describes primer sets for synthesizing 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesizing polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH1632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 240 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 240;
Best Local Similarity 50.0%; Pred. No. 5.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
Db 32 KQKGVFHI 39
XX
RESULT 132
AAU30407
ID AAU30407 standard; protein: 240 AA.
XX
XX AAU30407;
XX
XX 18-DEC-2001 (first entry)
XX
DE Novel human secreted protein #898.
XX
XX
KM Human; vaccination; gene therapy; nutritional supplement;
KM stem cell proliferation; haematopoiesis; nerve tissue regeneration;
KM immune suppression; immune stimulation; anti-inflammatory; leukaemia.
XX
XX Homo sapiens.
OS
XX
XX WO200179449-A2.
PN
XX
XX 25-OCT-2001.
PD
XX
XX 16-APR-2001; 2001WO-US008656.
PF
XX
XX 18-APR-2000; 2000US-00552929.
PR 26-JAN-2001; 2001US-00770160.
PR
XX
XX (HYSB-) HYSBQ INC.
XX
XX Tang YT, Liu C, Drmanac RT;
PI

DR WPI; 2001-611725/70.
XX
PT Nucleic acids encoding a range of human polypeptides, useful in genetic
PT vaccination, testing and therapy.
XX
PS Claim 20; Page 290; 765pp; English.
XX
CC The invention relates to novel human secreted polypeptides. The
CC polypeptides and antibodies to the polypeptides are useful for
CC determining the presence of or predisposition to a disease associated
CC with altered levels of polypeptide. The polypeptides are also useful for
CC identifying agents (agonists and antagonists) that bind to them. Cells
CC expressing the proteins are useful for identifying a therapeutic agent
CC for use in treatment of a pathology related to aberrant expression or
CC physiological interactions of the polypeptide. Vectors comprising the
CC nucleic acids encoding the polypeptides and cells genetically engineered
CC to express them are also useful for producing the proteins. The proteins
CC are useful in genetic vaccination, testing and therapy, and can be used
CC as nutritional supplements. They may be used to increase stem cell
CC proliferation; to regulate haematopoiesis; and in bone, cartilage, tendon
CC and/or nerve tissue growth or regeneration; immune suppression and/or
CC stimulation; as anti-inflammatory agents; and in treatment of leukemias.
CC AAU29510-AAU3304 represent the amino acid sequences of novel human
CC secreted proteins of the invention
XX
SQ Sequence 240 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 240;
Best Local Similarity 50.0%; Pred. No. 5.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHT 8
DB 102 NQFRVDHI 109
XX
RESULT 133
ABR01767
ID ABR01767 standard; protein; 240 AA.
XX
AC ABR01767;
XX
DT 22-APR-2003 (first entry)
XX
DE Human breast specific polypeptide #82.
XX
XX Human; breast specific nucleic acid; BSNA; breast; cytostatic;
KW gene therapy; vaccines; lung cancer; breast cancer;
KW breast specific polypeptide; BSP.
XX
OS Homo sapiens.
XX
PN WO200268645-A2.
XX
PD 06-SEP-2002.
XX
PF 20-NOV-2001; 2001WO-US045151.
XX
PR 20-NOV-2000; 2000US-0249992P.
XX
PA (DIAD-) DIADEXUS INC.
XX
PI Salceda S, Macina RA, Recipon H, Caferkey R, Sun Y, Liu C;
PI Turner LR;
XX
DR WPI; 2002-713379/77.
XX
PT New breast specific genes and proteins, useful in gene therapy or as
PT vaccines for treating breast cancer or non-cancerous breast diseases, as
PT well as for diagnosing, monitoring or staging these diseases.
XX
PS Claim 11; Page 265; 277pp; English.
XX

CC The invention relates to a novel isolated breast specific nucleic acid
CC molecule. The polypeptides of the invention have cytostatic activity. The
CC novel nucleic acids and polypeptides may have a use in gene therapy, and
CC as vaccines. The breast specific nucleic acid and polypeptide are useful
CC for diagnosing and monitoring the presence and metastases of lung cancer
CC in a patient. The antibody that specifically binds to the breast specific
CC polypeptide is useful for determining the presence of a breast specific
CC protein in a sample, as well as for treating a patient with breast
CC cancer, particularly by inducing an immune response against the breast
CC cancer cell expressing the breast specific nucleic acid molecule or
CC polypeptide. In particular, these breast specific genes and proteins are
CC useful for identifying, diagnosing, monitoring, staging, imaging and
CC treating breast cancer and non-cancerous disease states in breast tissue.
CC These are also useful in gene therapy, production of transgenic animals
CC and cells, and in the production of engineered breast tissue for
CC treatment and research. The sequences shown in ABR01866-ABR01788
CC represent the novel human breast specific polypeptides of the invention
XX
SQ Sequence 240 AA;
XX
Query Match 100.0%; Score 25; DB 5; Length 240;
Best Local Similarity 50.0%; Pred. No. 5.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
OY 1 XQXXVXHT 8
DB 32 KQKGVFHI 39
XX
RESULT 134
ABU00151
ID ABU00151 standard; protein; 240 AA.
XX
AC ABU00151;
XX
DT 17-JAN-2003 (first entry)
XX
DE Human novel polypeptide #244.
XX
XX Human; genetic disorder; gene mapping; medical imaging; cancer;
KW neurodegenerative disorder; lymphoid cell disorder; osteoporosis;
KW Parkinson's disease; Alzheimer's disease; bone degenerative disorder;
KW osteoarthritis; periodontal disease; liver fibrosis; viral infection;
KW fungal infection; bacterial infection; autoimmune disease; diabetes;
KW atopic dermatitis.
XX
OS Homo sapiens.
XX
PN WO200274961-A1.
XX
PD 26-SEP-2002.
XX
PF 14-MAR-2002; 2002WO-US005109.
XX
PR 15-MAR-2001; 2001US-00810173.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Zhou P, Goodrich R, Asundi V, Zhang J, Zhao Q, Ren F;
PI Xue AJ, Yang Y, Ma Y, Yamazaki V, Chen R, Wang Z, Ghosh M;
PI Wehrman T, Wang J, Wang D, Drmanac RT;
XX
DR WPI; 2003-040556/03.
XX
DR N-PSDB; ABX05229.
XX
PT New isolated polypeptides and polynucleotides, useful for preventing,
PT treating or ameliorating medical conditions, such as cancer,
PT neurodegenerative disorders, lymphoid cell disorders, bone degenerative
PT disorders, and infections.
XX
PS Claim 9; SEQ ID NO 770; 235pp; English.
XX
CC The invention relates to human polynucleotides and the polypeptides they

CC encode. The polynucleotides and polypeptides are useful in diagnostics,
CC forensics, gene mapping, medical imaging, identification of mutations
CC responsible for genetic disorders or other traits, assessing biodiversity
CC and producing many other types of data and products dependent on DNA and
CC amino acid sequences. They are also useful for preventing, treating or
CC ameliorating medical conditions, such as cancer, neurodegenerative
CC disorders (e.g. Parkinson's disease, Alzheimer's disease), lymphoid cell
CC disorders, osteoporosis, osteoarthritis, bone degenerative disorders,
CC periodontal disease, liver fibrosis, infections (e.g. viral, fungal or
CC bacterial) or autoimmune diseases (e.g. diabetes, atopic dermatitis).
CC Sequences ABG9988-ABG9989 and ABU0010-ABU0043 represent human
CC polypeptides of the invention. Note: The sequence data for this patent is
CC not represented in the printed specification but is based on sequence
CC information supplied by the European Patent Office

XX
SQ Sequence 240 AA;

Query Match 100.0%; Score 25; DB 6; Length 240;
Best Local Similarity 50.0%; Pred. No. 5.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXH 8
Db 32 KQKGVPH 39

RESULT 135

AAW77619
ID AAW77619 standard; protein; 244 AA.

AC AAW77619;

DT 30-OCT-1998 (first entry)

DE Mercuric reductase protein.

XX Staphylococcus aureus protein; immune response induction; eye infection;
XX antibody production; T-cell immune response; gastrointestinal infection;
XX respiratory infection; inhibitor; bacterial infection; cardiac infection;
XX central nervous system; kidney infection; urinary tract infection;
XX antimicrobial compound identification; broad spectrum antibiotic;
XX therapy.

OS Staphylococcus aureus.

XX Key Location/Qualifiers

FT Misc-difference 1..244
FT /note= "residues designated X are unspecified, and
FT represented as Xaa in the specification"

XX EP841394-A2.

XX 13-MAY-1998.

XX 24-SEP-1997; 97EP-00307485.

XX 24-SEP-1996; 96US-0027032P.

XX (SMIK) SMITHKLINE BEECHAM CORP.

XX (SMIK) SMITHKLINE BEECHAM PLC.

XX Black MT, Hodgson JE, Knowles DJC, Reichard RW, Nicholas RO;
XX PI Burnham MKR, Pratt JM, Rosenberg M, Ward JM, Lonetto MA;

XX WPI: 1998-252940/23.

XX DR N-PSDB; AAV53414.

XX New nucleic acid sequences from Staphylococcus aureus WCHU29 - useful in
XX PT vaccines and for treatment of bacterial infections of e.g. respiratory
XX tract and central nervous system.

XX Claim 11; Page 288-289; 390pp; English.

CC This sequence represents a Staphylococcus aureus protein, that based on
CC homology with a Staphylococcus aureus protein, is a mercuric reductase
CC (Ec 1.16.1.1) (Hg(ii) reductase), and is encoded by a DNA sequence of the
CC invention. The DNA sequences were isolated from Staphylococcus aureus
CC WCHU29 (NCIMB 40771). Host cells containing the DNA sequences are used to
CC produce polypeptides or fragments. The proteins are used in the treatment
CC of disease, for inducing an immune response by administering them, to
CC produce antibody and/or T-cell immune response. Antagonists of the
CC proteins are used for the inhibition of bacterial polypeptides.
CC Conditions which may be treated include bacterial infections, especially
CC respiratory, cardiac, gastrointestinal, central nervous, eye, kidney,
CC urinary tract, skin, bones and joints. The proteins can also be used to
CC identify antimicrobial compounds which are broad spectrum antibiotics,
CC especially useful in the treatment of H. pylori infection

XX
SQ Sequence 244 AA;

Query Match 100.0%; Score 25; DB 2; Length 244;
Best Local Similarity 50.0%; Pred. No. 5.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXH 8
Db 91 LQTSVPH 98

RESULT 136

ABG70228
ID ABG70228 standard; protein; 244 AA.

AC ABG70228;

DT 21-OCT-2002 (first entry)

DE Human prey protein for Shigella ospG #14.

XX Prey protein; ospB; ospD1; ipaD; ipaC; ipaH9.8; ospG; ospC1; Shigella;
XX shigellosis; bacillary dysentery; antibacterial; yeast two-hybrid system;
XX protein-protein interaction; SIP; selected interacting domain; human.

OS Homo sapiens.

XX WO200257303-A2.

XX 25-JUL-2002.

XX 11-JAN-2002; 2002MO-EP000777.

XX 12-JAN-2001; 2001US-0261130P.

XX (HYBR-) HYBRIGENICS.

XX Legrain P;

XX WPI: 2002-599706/64.

XX DR N-PSDB; ABS51621.

XX New complex of protein-protein interactions between a bait Shigella
XX PT flexneri polypeptide and a prey mammalian or human placenta polypeptide
XX FT for treating or preventing bacillary dysentery in a mammal or human.

XX Claim 7; Page 140; 162pp; English.

XX The invention relates to a complex of protein-protein interactions
XX between a Shigella flexneri polypeptide (e.g. ospB, ospD1, ipaD, ipaC,
XX ipaH9.8, ospG and ospC1) and a mammalian polypeptide defined in the
XX specification. The complexes are formed using the yeast two-hybrid
XX system. Also included are (1) a recombinant host cell expressing the
XX interactions between the Shigella flexneri polypeptide and a mammalian
XX polypeptide defined in the specification; (2) selecting a modulating
XX compound that inhibits or activates the protein-protein interactions; (3)
XX a modulating compound obtained from the method of (2); (4) a SID
XX (selected interacting domain) polypeptide or its fragment or variant

comprising the human polypeptides appearing as ABG70042-ABG70242; (5) a SID polynucleotide or its fragment or variant comprising encoding the above polypeptide or a vector comprising (5); (6) a recombinant host cell containing the vector; and (10) a protein chip comprising Shigella flexneri polypeptide and a mammalian polypeptide defined in the specification. A pharmaceutical composition comprising the compound, polypeptide or polynucleotide is useful for treating or preventing shigellosis (bacterial dysentery) in a human or mammal. The present sequence represents a human prey protein isolated by the yeast two-hybrid assay, forming a complex of the invention with a shigella protein

Sequence 244 AA;

Query Match
Best Local Similarity 100.0%; Score 25; DB 5; Length 244;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

1 XQXXVXHI 8
: : : : :
235 AQPAVQHI 242

RESULT 137
AAW64220
ID AAW64220 standard; protein; 245 AA.
XX
AC AAW64220;
XX
DT 06-OCT-1998 (first entry)
XX
DE Human secreted protein from clone CG300_3.
XX
KM Secreted protein; human adult testes; nutrition; cytokine; stimulant;
KM cell proliferation; differentiation; immune system; suppressor; ligand;
KM regulator; hematopoiesis; tissue growth; activin; inhibin; haemostatic;
KM chemotaxis; chemokinetic; thrombosis; receptor; cadherin; tumour;
KM anti-inflammatory.
XX
OS Homo sapiens.
XX
PN MO9827205-A2.
XX
PD 25-JUN-1998.
XX
PF 17-DEC-1997; 97WO-US0233330.
XX
PR 18-DEC-1996; 96US-00769192.
PR 13-JAN-1997; 97US-00783401.
PR 16-DEC-1997; 97US-00991872.
XX
PA (GEMV) GENETICS INST INC.
XX
PI Jacobs K, McCoy JM, Lavallic ER, Racie LA, Merberg D, Treacy M;
PI Spaulding V, Agostino MJ;
XX
XX WPI: 1998-362774/31.
DR N-PSDB; AAV44294.
XX
PT New polynucleotides and secreted proteins - obtained from human foetal
PT brain, human adult testes, human adult brain and human adult salivary
PT gland cDNA libraries.
XX
PS Claim 14j; Page 68; 110pp; English.
XX
CC This sequence represents a novel secreted protein from clone CG300_3
CC isolated from a human adult testes cDNA library. This protein has
CC applications for nutritional use, cytokine and cell
CC proliferation/differentiation activity, immune stimulating or suppressing
CC activity, hematopoiesis regulating activity, tissue growth activity,
CC activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC and thrombotic activity, receptor/ligand activity, anti-inflammatory
CC activity, cadherin/tumour invasion suppressor activity, tumour inhibition
CC activity and other activities

Sequence 245 AA;

Query Match
Best Local Similarity 100.0%; Score 25; DB 2; Length 245;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

1 XQXXVXHI 8
: : : : :
127 EQMAVHI 134

RESULT 138
AAM93721
ID AAM93721 standard; protein; 245 AA.
XX
AC AAM93721;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human polypeptide, SEQ ID NO: 3671.
XX
KM Human, full length cDNA; cDNA synthesis; oligo-capping.
XX
OS Homo sapiens.
XX
PN EP1130094-A2.
XX
PD 05-SEP-2001.
XX
PF 07-JUL-2000; 2000EP-00114089.
XX
PR 08-JUN-1999; 99JP-00194486.
PR 11-JAN-2000; 2000JP-00118774.
PR 02-MAY-2000; 2000JP-00183765.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y;
PI Wakematsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;
XX
DR WPI: 2001-524255/58.
DR N-PSDB; AAK94671.
XX
PT 830 Primers useful for synthesizing full length cDNA clones and their use
PT in genetic manipulation.
XX
PS Claim 8; SEQ ID NO 3671; 1380pp + Sequence listing; English.
XX
CC The invention relates to primers for synthesizing full length cDNA
CC clones. 830 cDNA molecules encoding a human protein have been isolated
CC and nucleotide sequences of 5' - and 3' - ends of the cDNA molecules have
CC been determined. Primers for synthesizing the full length cDNA are useful
CC for clarifying the function of the protein encoded by the cDNA. The full
CC length clones were obtained by construction of full length enriched cDNA
CC libraries that were synthesised by the oligo-capping method. The primers
CC enable the production of the full length cDNA easily without any special
CC methods. The present sequence is a polypeptide encoded by a full length
CC human cDNA of the invention. Note: The sequence data for this patent did
CC not form part of the printed specification, but was obtained in CD-ROM
CC format directly from EPO
XX
SQ Sequence 245 AA;

Query Match
Best Local Similarity 100.0%; Score 25; DB 4; Length 245;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

1 XQXXVXHI 8
: : : : :
127 EQMAVHI 134

RESULT 139
AAB90730
ID AAB90730 standard; protein; 245 AA.
XX
AC AAB90730;
XX
DT 07-JUN-2001 (first entry)
XX
DE Human CG300_3 protein sequence SEQ ID 159.
XX
KM Human; secreted protein; nutrient; cytokine modulator; proliferation;
KM differentiation; immune system modulator; tissue growth; chemotactic;
KM haemostatic; thrombolytic; anti-inflammatory; tumour inhibition;
KM haematopoiesis.
XX
OS Homo sapiens.
XX
FN W0200119988-A1.
PD 22-MAR-2001.
XX
PF 14-SEP-2000; 2000WO-US025135.
XX
PR 17-SEP-1999; 99US-00398829.
XX
PA (GEMV) GENETICS INST INC.
XX
PI Jacobs K, McCoy JM, Lavallic ER, Collins-Racie LA, Evans C;
PI Meberg D, Treacy M, Bowman MR, Spaulding V, Agostino NO;
XX
DR WPI; 2001-244801/25.
DR N-PSDB; AAF98468.
XX
PT Isolated nucleic acids encoding polypeptides, useful for modulating e.g.
PT cytokine and cell proliferation/differentiation activity, the immune
PT system and hematopoiesis regulating activity.
XX
PS Disclosure; Page 485-486; 557pp; English.
XX
CC Human cDNA clones represented in AAF98374 - AAF98489 encode secreted
CC proteins AAB90667 - AAB90750. The cDNA clones are isolated from various
CC tissue types, and may be used in the prevention, treatment and diagnosis
CC of diseases associated with inappropriate protein expression. The
CC polypeptides and nucleic acids may be used as nutrients or to modulate
CC cytokine and cell proliferation/differentiation activity and may also be
CC involved in modulation of the immune system. The cDNA sequences,
CC proteins, their agonists and/or antagonists exhibit haematopoiesis
CC regulating activity; tissue growth activity; activin/inhibin activity;
CC chemotactic/chemokinetic activity; haemostatic and thrombolytic activity;
CC receptor/ligand activity; anti-inflammatory activity; haematopoiesis
CC adhesion/tumour suppressor activity; and/or tumour inhibition
CC activity. Included in the invention are probes represented in AAF98490 -
CC AAF98572 which are specific for the cDNA clones encoding the secreted
CC proteins
XX
SQ Sequence 245 AA;
XX
Query Match 100.0%; Score 25; DB 4; Length 245;
Best Local Similarity 50.0%; Pred. No. 5.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHI 8
:|:::|
Db 127 EQMAVHI 134

RESULT 140
ABU43385
ID ABU43385 standard; protein; 246 AA.
XX
AC ABU43385;
XX
DT 19-JUN-2003 (first entry)

XX
DE Protein encoded by prokaryotic essential gene #28912.
XX
KM Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
KM Staphylococcus haemolyticus.
XX
PN W0200277183-A2.
XX
PD 03-OCT-2002.
XX
PF 21-MAR-2002; 2002WO-US009107.
XX
PR 21-MAR-2001; 2001US-00815242.
PR 06-SEP-2001; 2001US-00948993.
PR 25-OCT-2001; 2001US-0342923P.
PR 08-FEB-2002; 2002US-00072851.
PR 06-MAR-2002; 2002US-0362699P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Wang L, Zamudio C, Malone C, Haeelbeck R, Ohlsen KU, Zyskind JW;
PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX
DR WPI; 2003-029926/02.
DR N-PSDB; ACA47255.
XX
PT New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX
PS Claim 25; SEQ ID NO 71309; 1766pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising any one of
CC the 613 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than *S. aureus*, *S. typhimurium*,
CC *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of
CC the target prokaryotic essential genes. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 246 AA;
XX
Query Match 100.0%; Score 25; DB 6; Length 246;
Best Local Similarity 50.0%; Pred. No. 5.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 QXXXVXHI 8
:|:::|

Db 152 SQGSVFH1 159

RESULT 141

ABM71246

ID ABM71246 standard; protein; 247 AA.

XX

AC ABM71246;

XX

DT 20-NOV-2003 (first entry)

XX

DE Staphylococcus aureus protein #486.

XX

KM Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis;

XX

OS Staphylococcus aureus.

XX

PN WO200294868-A2.

XX

PD 28-NOV-2002.

XX

PP 27-MAR-2002; 2002WO-IB002637.

XX

PR 27-MAR-2001; 2001GB-00007661.

XX

PA (CHIR-) CHIRON SPA.

XX

PI Maigiani V, Mora M, Scarselli M;

XX

DR WPI: 2003-120786/11.

XX

DR N-PSDB; ACF72806.

XX

PT New Staphylococcus aureus protein, useful as a vaccine for treating or

PT preventing Staphylococcal infection, specifically an infection caused by

PT S. aureus, e.g. sepsis.

XX

PS Claim 1; SEQ ID NO 972; 49pp; English.

XX

CC The invention relates to novel genes and encoded proteins from

CC Staphylococcus aureus. A composition comprising the S. aureus protein, a

CC nucleic acid encoding the protein, or an antibody to the protein, is

CC useful as a pharmaceutical, particularly as a vaccine for treating or

CC preventing infection due to Staphylococcus bacteria, specifically an

CC infection caused by S. aureus. The composition is particularly useful for

CC treating or preventing sepsis in a patient. The composition can also be

CC used for diagnostics. The protein is also used in an assay for enzymatic

CC studies and as a target for antibiotics. This sequence represents one of

CC the novel S. aureus proteins of the invention

XX

SQ Sequence 247 AA;

Qy 1 QXXXVXHI 8

Db 115 TQSIYSHI 122

Query Match 100.0%; Score 25; DB 6; Length 247;

Best Local Similarity 50.0%; Pred. No. 5.4e+03;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

RESULT 142

ABU19873

ID ABU19873 standard; protein; 250 AA.

XX

AC ABU19873;

XX

DT 19-JUN-2003 (first entry)

XX

DE Protein encoded by prokaryotic essential gene #5400.

XX

KM Antisense; prokaryotic essential gene; cell proliferation; drug design.

XX

OS Borrelia cepacia.

XX

PN WO200272183-A2.

XX

PD 03-OCT-2002.

XX

PP 21-MAR-2002; 2002WO-US009107.

XX

PR 21-MAR-2001; 2001US-00815242.

XX

PR 06-SEP-2001; 2001US-00948893.

XX

PR 25-OCT-2001; 2001US-0342923P.

XX

PR 08-FEB-2002; 2002US-00072851.

XX

PR 06-MAR-2002; 2002US-0362639P.

XX

PA (ELIT-) ELITRA PHARM INC.

XX

PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;

XX

PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;

XX

DR WPI: 2003-029926/02.

XX

DR N-PSDB; ACA23743.

XX

PT New antisense nucleic acids, useful for identifying proteins or screening

PT for homologous nucleic acids required for cellular proliferation to

PT isolate candidate molecules for rational drug discovery programs.

XX

PS Claim 25; SEQ ID NO 47797; 1766pp; English.

XX

CC The invention relates to an isolated nucleic acid comprising any one of

CC the 6213 antisense sequences given in the specification where expression

CC of the nucleic acid inhibits proliferation of a cell. Also included are:

CC (1) a vector comprising a promoter operably linked to the nucleic acid

CC encoding a polypeptide whose expression is inhibited by the antisense

CC nucleic acid; (2) a host cell containing the vector; (3) an isolated

CC polypeptide or its fragment whose expression is inhibited by the

CC antisense nucleic acid; (4) an antibody capable of specifically binding

CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular

CC proliferation or the activity of a gene in an operon required for

CC the gene product or that has an activity against a biological pathway

CC required for proliferation, or that inhibits cellular proliferation; (8)

CC identifying a gene required for cellular proliferation or the biological

CC pathway in which a proliferation-required gene or its gene product lies

CC or a gene on which the test compound that inhibits proliferation of an

CC organism acts; (9) manufacturing an antibiotic; (10) profiling a

CC compound's activity; (11) a culture comprising strains in which the gene

CC product is overexpressed or underexpressed; (12) determining the extent

CC to which each of the strains is present in a culture or collection of

CC strains; or (13) identifying the target of a compound that inhibits the

CC proliferation of an organism. The antisense nucleic acids are useful for

CC identifying proteins or screening for homologous nucleic acids required

CC for cellular proliferation to isolate candidate molecules for rational

CC drug discovery programs; or for screening homologous nucleic acids

CC required for proliferation in cells other than S. aureus, S. typhimurium,

CC K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of

CC the target prokaryotic essential genes. Note: The sequence data for this

CC patent did not form part of the printed specification, but was obtained

CC in electronic format directly from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 250 AA;

Qy 1 QXXXVXHI 8

Db 101 HQAGVXHI 108

Query Match 100.0%; Score 25; DB 6; Length 250;

Best Local Similarity 50.0%; Pred. No. 5.5e+03;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

RESULT 143

ADC31828

ADCC1828 standard; protein; 250 AA.
 ADCC1828;
 18-DEC-2003 (first entry)
 Human novel polypeptide sequence, SEQ ID NO:1910.
 Human; diagnostic; drug screening; forensics; gene mapping; biodiversity assessment; Parkinson's disease; Alzheimer's disease; neurodegenerative diseases; anaemia; platelet disorder; wound; burns; ulcers; osteoporosis; autoimmune disease; cancer; molecular weight marker; food supplement; antiparkinsonian; nootropic; neuroprotective; antianaemic; anticoagulant; thrombolytic; vulnery; antitumor; osteopathic; immunosuppressive; antiinflammatory; cytostatic; gene therapy; chromosome 16.
 Homo sapiens.
 WO2003029271-A2.
 10-APR-2003.
 24-SEP-2002; 2002WO-US030474.
 24-SEP-2001; 2001US-0324631P.
 (HYSE-) HYSEQ INC.
 Tang TY, Zhang J, Ren F, Xue AJ, Zhao QA, Wang J, Wehman T, Zhou F, Ghosh M, Wang D, Ma Y, Asundi V, Wang Z, Weng G, Haley-Vicente D, Dmanac RT;
 WPI: 2003-371981/35.
 N-PSDB; ADC30857.
 New polynucleotide and polypeptide useful for diagnosing, preventing or treating conditions such as neurodegenerative diseases, anemia, platelet disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or cancer.
 Claim 20; SEQ ID NO 1910; 1185bp; English.
 The invention relates to 971 novel human cDNA sequences (ADC29919-ADC30889) and the polypeptides they encode (ADC30890-ADC31860). The invention also relates to nucleic acid sequences over 99% identical with the novel human cDNAs. The invention additionally encompasses expression vectors and host cells comprising a nucleic acid of the invention; the recombinant production of a polypeptide of the invention; an antibody against a polypeptide of the invention; a method of detecting polynucleotides or polypeptides of the invention; and methods of identifying a compound which binds to a polypeptide of the invention. The invention further discloses methods of preventing, treating or ameliorating a medical condition; kits comprising polynucleotide probes and/or monoclonal antibodies for carrying out the methods of the invention; methods for the identification of compounds that modulate the expression or activity of the polynucleotide and/or polypeptide; and 767 coding sequences corresponding to the cDNA sequences of the invention (ADC31861-ADC32627) and the polypeptides encoded by the contigs (ADC32628-ADC33941). The nucleic acids and polypeptides of the invention are useful in diagnostics, drug screening, forensics, gene mapping, in the identification of mutations responsible for genetic disorders or other traits, for assessing biodiversity, and in producing many other types of data and products dependent on DNA and amino acid sequences. They are also used for treating diseases such as Parkinson's disease, Alzheimer's disease and other neurodegenerative diseases, anaemia, platelet disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or cancer. The nucleic acids may also be used as hybridisation probes or primers, and in the recombinant production of a protein. The polypeptides are also useful in generating antibodies, as molecular weight markers, and as food supplements. The present sequence represents a specifically claimed human polypeptide sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but

was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
 Sequence 250 AA;
 Query Match 100.0%; Score 25; DB 7; Length 250;
 Best Local Similarity 50.0%; Pred. No. 5.5e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 1 X0XXVXHI 8
 :|:::|
 172 IQTVVHI 179
 RESULT 144
 AAE20104
 ID AAE20104 standard; protein; 251 AA.
 AC AAE20104;
 XX 29-AUG-2003 (revised)
 DT 18-JUN-2002 (first entry)
 DE Lactobacillus rhamnosus triosephosphate isomerase tpi.
 XX Enzyme; flavour; aroma; texture; nutritional; dairy manufacture; therapy; fermentation process; anti-infection; rotavirus infection; heart disease; infantile diarrhoea; lactose digestion; anti-cancer; autoimmune disorder; anti-mutagenesis; immune system modulation; allergy; Helicobacter pylori; antihypertensive effect; urogenital infection; hepatic encephalopathy; bowel syndrome; endocarditis; transgenic microbe; tpi; EC 5.3.1.1;
 KM triosephosphate isomerase.
 XX Lactobacillus rhamnosus; HN001.
 OS
 XX WO200212506-A1.
 PD 14-FEB-2002.
 XX 08-AUG-2001; 2001WO-NZ000160.
 PF 08-AUG-2000; 2000US-00634238.
 PR 28-NOV-2000; 2000US-00724623.
 PA (GENE-) GENESIS RES & DEV CORP LTD.
 XX (VIAL-) VIALACTIA BIOSCIENCE NZ LTD.
 PI Glenn M, Havukkala IU, Bloksberg LN, Lubbers MW, Dekker J, Christensson AC, Holland R, O'toole PW, Reid JR, Coolbear T;
 DR WPI: 2002-241760/29.
 N-PSDB; AAD31875, AAD31896.
 DR
 XX New polynucleotides and polypeptides from Lactobacillus rhamnosus, useful in e.g. improving the flavour, aroma, texture and health-related benefits of milk-derived products, or in increasing properties of microbes.
 Claim 11; Fig 40; 257bp; English.
 The present invention relates to a new isolated polynucleotide comprising a sequence present in Lactobacillus rhamnosus strain HN001 and encoding a polypeptide capable of modifying the flavour, aroma, texture, nutritional and health benefits of milk-derived products, and/or survivability of microbes in dairy manufacturing processes. The polynucleotides are useful for improving the properties of microbes used in the manufacture of milk-derived products such as cheeses, yogurt, fermented milk products, sour milks and buttermilk; in modifying the flavour, aroma, texture and health-related benefits of milk-derived products and in increasing the survival of microbes during industrial fermentation processes. The bacteria may be used to increase resistance to enteric pathogens and anti-infection activity, including treatment of rotavirus infection and infantile diarrhoea, aid in lactose digestion, as anti-cancer and anti-mutagenesis; liver cancer reduction; reduction of small bowel bacterial overgrowth;

CC immune system modulation and treatment of autoimmune disorders and
CC allergies; treatment of allergic responses to foods; reduction of blood
CC lipids; prevention of heart disease; antihypertensive effect;
CC prevention and treatment of urogenital infections, Helicobacter pylori,
CC or hepatic encephalopathy; treatment of inflammatory bowel disorder and
CC irritable bowel syndrome; modulation of endocarditis; and for improved
CC protein and carbohydrate utilization and conversion. The transgenic
CC microbial population can be administered to a mammal as an anti-
CC carcinogenic agent. The present sequence is Lactobacillus rhamnosus
CC triosephosphate isomerase tpi. The EC number for triosephosphate
CC isomerase is 5.3.1.1. (Updated on 29-AUG-2003 to standardise OS field)
XX
SQ Sequence 251 AA;

Query Match 100.0%; Score 25; DB 5; Length 251;
Best Local Similarity 50.0%; Pred. No. 5.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
DB 183 AOEYVAHI 190

RESULT 145

AAW04738
ID AAW04738 standard; protein; 253 AA.

AC AAW04738;

DT 04-DEC-1996 (first entry)

DE Wasp venom 30 kDa insecticidal toxin.

KW Wasp; venom; insecticide; pesticide; neurotoxin; tobacco budworm;
KM Heliothis virescens; biological control; insect; baculovirus.

OS Bracon hebetor.

XX MO9625429-A1. 1

PD 22-AUG-1996.

PF 16-FEB-1996; 96WO-US002181.

PR 17-FEB-1995; 95US-00392546.

PA (NESP-) NPS PHARM INC.

PI Johnson JH, Kral RM, Krapcho K;

DR WPI; 1996-393340/39.

DR N-PSDB; AAT37331.

PT Insecticidal fractions of Bracon spp. wasp venom - have neurotoxic effect
on tobacco budworm and are useful for controlling insect pests.

XX Claim 3; Page 45-46; 69pp; English.

XX A 16 kDa toxin (AAW04736), 30 kDa toxin (AAW04738), 18-1 toxin (AAW04739)
CC and 18-2 toxin (AAW04740) were isolated from the venom gland of Bracon
CC hebetor wasps by bioassay using tobacco budworm. They show neurotoxic
CC effects on insect pests but have only a minimal toxicity to mammals. A
CC cDNA clone (AAT37331) coding for the 30 kDa toxin precursor (AAW04737)
CC can be used for prochn. of recombinant 30 kDa toxin by expression in
CC prokaryotic or eukaryotic host cells. The wasp venom toxins are used as
CC insecticidal agents. Expression from a baculovirus vector can be used for
CC the biological control of insect pests

XX Sequence 253 AA;

Query Match 100.0%; Score 25; DB 2; Length 253;
Best Local Similarity 50.0%; Pred. No. 5.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
DB 70 OQRKVEHI 77

RESULT 146

ABP79577
ID ABP79577 standard; protein; 253 AA.

AC ABP79577;

DT 07-MAR-2003 (first entry)

DE N. gonorrhoeae amino acid sequence SEQ ID 5684.

KW Antibacterial; infection; vaccine; gene therapy.

OS Neisseria gonorrhoeae.

PN WO200279243-A2.

PD 10-OCT-2002.

PF 12-FEB-2002; 2002WO-IB002059.

PR 12-FEB-2001; 2001GB-00003424.

PA (CHIR-) CHIRON SPA.

PI Fontana MR, Piazza M, Maignani V, Monaci E;

DR WPI; 2003-058415/05.

DR N-PSDB; ABZ40547.

PT New protein from Neisseria gonorrhoeae, useful for the manufacture of a
medicament for treating or preventing N. gonorrhoeae infection.

PS Disclosure; Page 603; 815pp; English.

CC The present invention relates to proteins from Neisseria gonorrhoeae.
CC Also disclosed are the nucleic acid molecules encoding the proteins and
CC antibodies that specifically bind to the proteins. The composition
CC comprising the protein, nucleic acid or antibody is useful for the
CC manufacture of a medicament for treating or preventing N. gonorrhoeae
CC infection, this may be in the form of a vaccine or gene therapy.
CC Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC molecules of the invention

XX Sequence 253 AA;

Query Match 100.0%; Score 25; DB 6; Length 253;
Best Local Similarity 50.0%; Pred. No. 5.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XQXXVXHI 8
DB 242 AQAAYEHI 249

RESULT 147

ADA35127
ID ADA35127 standard; protein; 255 AA.

AC ADA35127;

DT 20-NOV-2003 (first entry)

DE Acinetobacter baumannii protein #2288.

KW Acinetobacter baumannii; bacterial disease; antibacterial; vaccine;
KW plant biocontrol agent;

XX

OS Acinetobacter baumannii.
XX US6562958-B1.
XX 13-MAY-2003.
PD
XX 04-JUN-1999; 99US-00328352.
XX 09-JUN-1998; 98US-0088701P.
PR
XX (GENO-) GENOME THERAPEUTICS CORP.
PA
XX Breton G, Bush D;
XX
XX WPI; 2003-576092/54.
DR N-PSDB; ADA31001.
XX
PT New Acinetobacter baumannii proteins and nucleic acids, useful as reagents
PT for diagnosing a bacterial disease, as components of antibacterial
PT vaccines, as targets for antibacterial drugs, or as biocontrol agents for
PT plants.
XX
PS Example; SEQ ID NO 6414; 328bp; English.
XX
CC The invention relates to isolated Acinetobacter baumannii nucleic acids.
CC The A. baumannii nucleic acids and polypeptides are useful as reagents
CC for diagnosing a bacterial disease, as components of antibacterial
CC vaccines, as targets for antibacterial drugs, to detect the presence of
CC A. baumannii and other Acinetobacter species in a sample, in screening
CC compounds for the ability to interfere with the A. baumannii life cycle
CC or to inhibit A. baumannii infection, and as biocontrol agents for
CC plants. The present sequence represents the amino acid sequence of an A.
CC baumannii protein.
XX
SQ Sequence 255 AA;

Query Match 100.0%; Score 25; DB 6; Length 255;
Best Local Similarity 50.0%; Pred. No. 5.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
Db 53 AQAATVEHI 60

RESULT 148
AAG13274
ID AAG13274 standard; protein; 261 AA.
XX
AC AAG13274;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 12710.
XX
KM Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
XX 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-013180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.

PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139763P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140695P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 01-JUL-1999; 99US-0142154P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
PR 16-JUL-1999; 99US-0144085P.
PR 16-JUL-1999; 99US-0144086P.
PR 19-JUL-1999; 99US-0144325P.

PR 19-JUL-1999; 99US-0144331P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144333P.
PR 19-JUL-1999; 99US-0144334P.
PR 19-JUL-1999; 99US-0144335P.
PR 20-JUL-1999; 99US-0144336P.
PR 20-JUL-1999; 99US-0144337P.
PR 20-JUL-1999; 99US-0144338P.
PR 21-JUL-1999; 99US-0144339P.
PR 21-JUL-1999; 99US-0144340P.
PR 21-JUL-1999; 99US-0145088P.
PR 22-JUL-1999; 99US-0145089P.
PR 22-JUL-1999; 99US-0145090P.
PR 22-JUL-1999; 99US-0145192P.
PR 23-JUL-1999; 99US-0145193P.
PR 23-JUL-1999; 99US-0145218P.
PR 23-JUL-1999; 99US-0145224P.
PR 26-JUL-1999; 99US-0145276P.
PR 27-JUL-1999; 99US-0145913P.
PR 27-JUL-1999; 99US-0145918P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
PR 02-AUG-1999; 99US-0146388P.
PR 02-AUG-1999; 99US-0146389P.
PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 04-AUG-1999; 99US-0147302P.
PR 05-AUG-1999; 99US-0147129P.
PR 06-AUG-1999; 99US-0147260P.
PR 06-AUG-1999; 99US-0147303P.
PR 06-AUG-1999; 99US-0147416P.
PR 09-AUG-1999; 99US-0147493P.
PR 09-AUG-1999; 99US-0147935P.
PR 10-AUG-1999; 99US-0148171P.
PR 11-AUG-1999; 99US-0148311P.
PR 12-AUG-1999; 99US-0148341P.
PR 13-AUG-1999; 99US-0148565P.
PR 13-AUG-1999; 99US-0148684P.
PR 16-AUG-1999; 99US-0149368P.
PR 17-AUG-1999; 99US-0149175P.
PR 18-AUG-1999; 99US-0149426P.
PR 20-AUG-1999; 99US-0149722P.
PR 20-AUG-1999; 99US-0149723P.
PR 20-AUG-1999; 99US-0149929P.
PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
PR 27-AUG-1999; 99US-0151066P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
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Best Local Similarity 50.0%; Pred. No. 5.8e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

CY 1 XXXVXHI 8
DB 45 SQRKVNHI 52

RESULT 149
ABP77401
ID ABP77401 standard; protein; 264 AA.
XX
AC ABP77401;
XX
XX 07-MAR-2003 (first entry)
DT
XX
DE N. gonorrhoeae amino acid sequence SEQ ID 1332.
XX
KW Antibacterial; infection; vaccine; gene therapy.
XX
OS Neisseria gonorrhoeae.
XX
PN WO200279243-A2.
XX
PD 10-OCT-2002.
XX
PE 12-FEB-2002; 2002WO-IB002069.
XX
PR 12-FEB-2001; 2001GB-00003424.
XX
PA (CHIR-) CHIRON SPA.
XX
PI Fontana MR, Pizza M, Maignani V, Monaci E;
XX
XX WPI; 2003-058415/05.
DR N-PSDB; ABZ38371.
XX
XX New protein from Neisseria gonorrhoeae, useful for the manufacture of a
PT medicament for treating or preventing N. gonorrhoeae infection.
XX
XX Disclosure; Page 285; 815pp; English.
XX
CC The present invention relates to proteins from Neisseria gonorrhoeae.

CC Also disclosed are the nucleic acid molecules encoding the proteins and
CC antibodies that specifically bind to the proteins. The composition
CC comprising the protein, nucleic acid or antibody is useful for the
CC manufacture of a medicament for treating or preventing N. gonorrhoeae
CC infection, this may be in the form of a vaccine or gene therapy.
CC Sequences given in records ABP6736-ABP61046 represent nucleic acid
CC molecules of the invention

XX Sequence 264 AA;

Query Match Best Local Similarity 100.0%; Score 25; DB 6; Length 264;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XXXVXHI 8
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Db 5 LQKVRHI 12

RESULT 150
AAG29599
ID AAG29599 standard; protein; 267 AA.

XX AAG29599;
DT 17-OCT-2000 (first entry)

XX Arabidopsis thaliana protein fragment SEQ ID NO: 35245.

KM Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
termination sequence.

XX Arabidopsis thaliana.

PN EP1033405-A2.

XX EP1033405-A2.

XX 06-SEP-2000.

PF 25-FEB-2000; 2000EP-00301439.

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Best Local Similarity 100.0%; Score 25; DB 3; Length 267;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHI 8
DB 70 PQCVSHI 77
RESULT 151
ABBS4124
ID ABBS4124 standard; protein; 269 AA.
XX
AC ABBS4124;
XX
XX 29-AUG-2003 (revised)
DT 16-MAY-2002 (first entry)
XX
DE Lactococcus lactis protein ylcB.
XX
XX Biosynthesis; biodegradation; lactic bacterium; yogurt; cheese.
XX
OS Lactococcus lactis; IL1403.
XX
XX FR2807446-A1.
XX
XX 12-OCT-2001.
XX
XX 11-APR-2000; 2000FR-00004630.
XX
XX 11-APR-2000; 2000FR-00004630.
XX
XX (INRG ) INRA INST NAT RECH AGRONOMIQUE.
XX
XX Bolotline A, Sorokine A, Renault P, Ehrlich SD;
XX
XX WPI; 2002-043418/06.
XX
XX New nucleotide sequence useful in the identification or Lactococcus
XX lactis and related species.
XX
XX Claim 6; SEQ ID NO 826; 2504bp; French.
XX
XX The present invention is related to a Lactococcus lactis nucleotide
XX sequence (ABA90521) and related proteins (ABBS3300-ABBS5621). The nucleic
XX acid sequence is useful in the detection and/or amplification of nucleic
XX acid sequence, particularly to identify Lactococcus lactis or related
XX species. The proteins of the invention are useful for the biosynthesis or
XX biodegradation of a composition of interest. The invention helps research
XX in lactic bacteria, particularly useful in the production of yogurt and
XX cheese. Note: The sequence data for this patent is based on equivalent
XX patent WO200177334 (published 18-OCT-2001) which is available in
XX electronic format directly from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences. (Updated on 29-AUG-2003 to
XX standardise OS field)
XX
XX Sequence 269 AA;
QY Query Match 100.0%; Score 25; DB 5; Length 269;
DB Best Local Similarity 50.0%; Pred. No. 6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHI 8
DB 256 DQHAVHI 263
RESULT 152
ABU25900
ID ABU25900 standard; protein; 269 AA.

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XX AC ABU25900;
XX 19-JUN-2003 (first entry)
XX DE Protein encoded by Prokaryotic essential gene #11427.
XX KM Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX OS Corynebacterium diphtheriae.
XX PN W0200277183-A2.
XX PD 03-OCT-2002.
XX PF 21-MAR-2002; 2002WO-US009107.
XX PR 21-MAR-2001; 2001US-00815242.
XX PR 06-SEP-2001; 2001US-00948993.
XX PR 25-OCT-2001; 2001US-0342923P.
XX PR 08-FEB-2002; 2002US-00072851.
XX PR 06-MAR-2002; 2002US-0362699P.
XX PA (ELIT-) ELITRA PHARM INC.
XX PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
XX PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX DR WPI; 2003-029926/02.
XX DR N-PSDB; ACA29770.
XX PT New antisense nucleic acids, useful for identifying proteins or screening
XX PT for homologous nucleic acids required for cellular proliferation to
XX PT isolate candidate molecules for rational drug discovery programs.
XX PS Claim 25; SEQ ID NO 53824; 1766pp; English.
XX XX The invention relates to an isolated nucleic acid comprising any one of
XX the 6213 antisense sequences given in the specification where expression
XX of the nucleic acid inhibits proliferation of a cell. Also included are:
XX (1) a vector comprising a promoter operably linked to the nucleic acid
XX encoding a polypeptide whose expression is inhibited by the antisense
XX nucleic acid; (2) a host cell containing the vector; (3) an isolated
XX polypeptide or its fragment whose expression is inhibited by the
XX antisense nucleic acid; (4) an antibody capable of specifically binding
XX the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
XX proliferation or the activity of a gene in an operon required for
XX proliferation; (7) identifying a compound that influences the activity of
XX the gene product or that has an activity against a biological pathway
XX required for proliferation, or that inhibits cellular proliferation; (8)
XX identifying a gene required for cellular proliferation or the biological
XX pathway in which a proliferation-required gene or its gene product lies
XX or a gene on which the test compound that inhibits proliferation of an
XX organism acts; (9) manufacturing an antibiotic; (10) profiling a
XX compound's activity; (11) a culture comprising strains in which the gene
XX product is overexpressed or underexpressed; (12) determining the extent
XX to which each of the strains is present in a culture or collection of
XX strains; or (13) identifying the target of a compound that inhibits the
XX proliferation of an organism. The antisense nucleic acids are useful for
XX identifying proteins or screening for homologous nucleic acids required
XX for cellular proliferation to isolate candidate molecules for rational
XX drug discovery programs, or for screening homologous nucleic acids
XX required for proliferation in cells other than *S. aureus*, *S. typhimurium*,
XX *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of
XX the target prokaryotic essential genes. Note: The sequence data for this
XX patent did not form part of the printed specification, but was obtained
XX in electronic format directly from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
SQ Sequence 269 AA;

Query Match 100.0%; Score 25; DB 6; Length 269;
Best Local Similarity 50.0%; Pred. No. 6e+03;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Oy 1 XXXXXVXHI 8
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Db 85 YQGTVSHI 92
RESULT 153
AAG29598
ID AAG29598 standard; protein; 271 AA.
XX AC AAG29598;
XX 17-OCT-2000 (first entry)
XX DE Arabidopsis thaliana protein fragment SEQ ID NO: 35244.
XX KM Protein identification; signal transduction pathway; metabolic pathway;
XX KM hybridisation assay; genetic mapping; gene expression control; promoter;
XX KM termination sequence.
XX OS Arabidopsis thaliana.
XX PN EP1033405-A2.
XX PD 06-SEP-2000.
XX PF 25-FEB-2000; 2000EP-00301439.
XX PR 25-FEB-1999; 99US-0121825P.
XX PR 05-MAR-1999; 99US-0123180P.
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PR 09-AUG-1999; 99US-0147935P.
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PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
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PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 271;
Best Local Similarity 50.0%; Pred. No. 6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHI 8
DB 74 POCVSHI 81

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RESULT 154
ABB90834
ID ABB90834 standard; protein; 271 AA.
XX
AC ABB90834;
XX
DT 31-MAY-2002 (first entry)
XX
DE Herbicidally active polypeptide SEQ ID NO 45.
XX
KM Herbicidal; plant; agriculture; herbicide.
XX
OS Arabidopsis thaliana.
XX
PN W0200210210-A2.
XX
PD 07-FEB-2002.
XX
PF 28-AUG-2001; 2001WO-EP009892.
XX
PR 28-AUG-2001; 2001WO-EP009892.
XX
PA (PARB ) BAYER AG.
XX
PI Tietjen K, Weidler M;
XX
DR WPI; 2002-269010/31.
XX
PT Identifying plant target proteins for herbicidally active compounds,
PT comprising aligning and comparing nucleic acid or amino acid sequences
PT from plant with nucleic acid or amino acid sequences from non-plant
PT organisms.
XX
PS Claim 5; SEQ ID NO 45; 261pp + Sequence Listing; English.
XX
CC The invention relates to identifying target proteins (ABB90790-ABB94016)
CC for herbicidally active compounds, comprising aligning and comparing
CC nucleic acid or amino acid sequences from plant with nucleic acid or
CC amino acid sequences from non-plant organisms using suitable search
CC parameters, where plant sequences having an E-value greater by a factor
CC of 3 than the E-value of most similar non-plant sequences are selected.
CC The polypeptides or nucleic acids encoding them are useful for
CC identifying modulators. The identified modulators are useful as
CC herbicides
XX
SQ Sequence 271 AA;
XX
Query Match 100.0%; Score 25; DB 5; Length 271;
Best Local Similarity 50.0%; Pred. No. 6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHI 8
Db 74 PQECVSHI 81

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RESULT 155
AAR9571
ID AAR9571 standard; protein; 275 AA.
XX
AC AAR9571;
XX
DT 30-SEP-1996 (first entry)
XX
DE Wasp venom BrhTX-1 subunit (d).
XX
KM Wasp; venom; neurotoxin; insecticide; biological control agent;
KM Lepidoptera; insect.
XX
OS Bracon hebetor.
XX
XX
XX Key Location/Qualifiers
FH Peptide 1..22
PT

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FT /label= Sig_peptide
FT Protein 23..275
FT /label= Mat_protein
XX
XX W09616171-A1.
XX
PD 30-MAY-1996.
XX
PF 21-NOV-1995; 95WO-GB002720.
XX
PR 22-NOV-1994; 94GB-00023540.
PR 19-JUN-1995; 95GB-00001074.
PR 29-JUN-1995; 95GB-00013293.
XX
PA (ZENE ) ZENECA LTD.
PA (CSIR ) COMMONWEALTH SCI & IND RES ORG.
XX
PI Windaes JD, Duncan RE, Baule VJ, Christian PD;
XX
DR WPI; 1996-268607/27.
DR N-PSDB; AAT32432.
XX
PT Bracon hebetor toxins and DNA encoding them - useful in biological
PT control agents to combat insect pests.
XX
PS Claim 14; Page 47; 83pp; English.
XX
CC The amino acid sequence (AAR9571) of subunit (d) of the BrhTX-1
CC neurotoxin of the wasp Bracon hebetor was deduced from a cDNA clone
CC (AAT32432) isolated from a cDNA library of the female wasp. Bracon
CC hebetor is a parasite of lepidopteran larvae and produces a paralyzing
CC venom. Recombinant subunit (d) of BrhTX-1 can be produced in transformed
CC host cells, partic. fungi, and is useful in the control of insect pests.
CC Bacterial, viral or fungal biological control agents or transgenic plants
CC expressing the subunit are also useful for combating insect pests
XX
SQ Sequence 275 AA;
XX
Query Match 100.0%; Score 25; DB 2; Length 275;
Best Local Similarity 50.0%; Pred. No. 6.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHI 8
Db 92 QQRKVEHI 99

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RESULT 156
AAW04737
ID AAW04737 standard; protein; 275 AA.
XX
AC AAW04737;
XX
DT 04-DEC-1996 (first entry)
XX
DE Wasp venom 30 kDa insecticidal toxin precursor.
XX
KM Wasp; venom; insecticide; pesticide; neurotoxin; tobacco budworm;
KM Heliothis virescens; biological control; insect.
XX
OS Bracon hebetor.
XX
XX
XX Key Location/Qualifiers
FH Peptide 1..22
FT /label= Sig_peptide
FT Protein 23..275
FT /label= Mat_protein
FT /note= "30 kDa toxin"
XX
XX W09625429-A1.
XX
XX 22-AUG-1996.
XX

```


PF 16-FEB-1996; 96W0-US002181.
XX
PR 17-FEB-1995; 95US-00392546.
XX
PA (NPS-) NPS PHARM INC.
XX
PI Johnson JH, Kral RM, Krapcho K;
XX
DR WPI: 1996-393340/39.
DR N-PSDB: AAT37331.
XX
PT Insecticidal fractions of Bracon spp. wasp venom - have neurotoxic effect
XX on tobacco budworm and are useful for controlling insect pests.
XX
PS Example 13; Page 50-51; 69pp; English.
XX
CC The precursor (AAW04737) of the 30 kDa insecticidal toxin (AAW04738) of
CC Bracon hebetor wasps is the product of a cDNA clone (AAI7331) isolated
CC from wasp venom gland cDNA. It is processed to form the mature 30 kDa
CC toxin which has a neurotoxic effect on tobacco budworm and which is
CC useful for controlling insect pests
XX
SQ Sequence 275 AA;
Query Match 100.0%; Score 25; DB 2; Length 275;
Best Local Similarity 50.0%; Pred. No. 6.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHI 8
: : : : :
Db 92 QORVHEI 99
RESULT 157
AAW52127
ID AAW52127 standard; protein; 275 AA.
XX
AC AAW52127;
XX
DT 18-JUN-1998 (first entry)
XX
DE Insecticidal toxin subunit BrHx-1d.
XX
KM Insecticidal toxin; Bracon hebetor; insect control; pathogen;
KM recombinant baculovirus.
XX
OS Bracon hebetor.
XX
FH Key Location/Qualifiers
FT Peptide 1..21
FT Protein /note= "putative leader sequence"
FT /note= "mature toxin subunit BrHx-1d"
XX
PN MO9744355-A1.
XX
PD 27-NOV-1997.
XX
PF 01-MAY-1997; 97W0-GB001205.
XX
PR 22-MAY-1996; 96GB-00010687.
PR 22-MAY-1996; 96GB-00010687.
PR 22-MAY-1996; 96GB-00010687.
PR 22-MAY-1996; 96GB-00010738.
PR 22-MAY-1996; 96GB-00010739.
PR 22-MAY-1996; 96GB-00010748.
XX
PA (ZENEC) ZENEC LTD.
PA (CSIR) COMMONWEALTH SCI & IND RES ORG.
XX
PI Duncan RE, Sumer M, Daly A, Christian PD, Windass JD;
PI Claudianos A;
XX

DR WPI: 1998-018430/02.
DR N-PSDB: AAV17148.
XX
PT New nucleic acid encoding a combination of insecticidal subunit(s) of
PT wasp toxin - and related transformed cells, insect pathogens and
PT combinations of proteins, useful as insecticides.
XX
PS Claim 1; Page 47-48; 84pp; English.
XX
CC This is an insecticidal toxin subunit BrHx-1d. The specification
CC provides a 1811 base pair spliced RNA (AAV17183) derived from a Bracon
CC hebetor genomic clone that encodes at least two of the insecticidal toxin
CC subunits shown in sequences AAW52124-W52128. The spliced RNA can
CC hybridise with extension products prepared from a BrHx-1a encoding 564
CC base pair (AAV17145) template with 6 specified primers. A nucleic acid
CC encoding at least one of the specified subunits can be modified so that
CC mRNA instability motifs and/or fortuitous splice sites are removed, or
CC insect-pest preference codons are used, so that expression of this
CC nucleic acid in insect cells yields practically the same protein as
CC unmodified nucleic acid in its endogenous organism. The nucleic acid
CC encoding an insecticidal toxin subunit can be complementary to a sequence
CC that hybridises under specified conditions to any of sequences shown in
CC AAV17145 to AAV17149. Cells transformed with these nucleic acids,
CC organisms regenerated from these cells and pathogens containing these
CC nucleic acids and insecticidal compositions comprising a combination of
CC the toxin subunits are all used for control of insects. The nucleic acids
CC are used to produce recombinant baculoviruses for insect control
XX
SQ Sequence 275 AA;
Query Match 100.0%; Score 25; DB 2; Length 275;
Best Local Similarity 50.0%; Pred. No. 6.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXVXHI 8
: : : : :
Db 92 QORVHEI 99
RESULT 158
AAG13273
ID AAG13273 standard; protein; 275 AA.
XX
AC AAG13273;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 12709.
XX
KM Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
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PR 21-APR-1999; 99US-0130449P.

PR 23-APR-1999; 99US-0130510P.
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PR 28-APR-1999; 99US-0131449P.
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PR 29-SEP-1999; 99US-0156596P.
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PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
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PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161922P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 275;
Best Local Similarity 50.0%; Pred. No. 6.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXH 8
Db 59 SQRKVNHI 66

RESULT 159

ADE63384
ID ADE63384 standard; protein; 280 AA.

XX ADE63384;

DT 29-JAN-2004 (first entry)

DE Rat Protein P10247, SEQ ID NO 9323.

XX Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KM chronic constriction injury; CCI; spared nerve injury; SNI; Chung.

XX Rattus norvegicus.

PN W02003016475-A2.

PD 27-FEB-2003.

PF 14-AUG-2002; 2002WO-US025765.

PR 14-AUG-2001; 2001US-0312147P.

PR 01-NOV-2001; 2001US-0346382P.

PR 26-NOV-2001; 2001US-0333347P.

XX (GEHO) GEN HOSPITAL CORP.

PA (FARB) BAYER AG.

PI Woolf C, D'Urso D, Befort K, Costigan M;

DR WPI; 2003-268312/26.

XX GENBANK; P10247.

XX New composition comprising two or more isolated polypeptides, useful for

XX preparing a medicament for treating pain in an animal.

XX Claim 1; Page: 1017pp; English.

CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a rat protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

Sequence 280 AA;

Query Match 100.0%; Score 25; DB 7; Length 280;
Best Local Similarity 50.0%; Pred. No. 6.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXH 8
Db 197 QSERVSHI 204

RESULT 160
ADE63392
ID ADE63392 standard; protein; 280 AA.

XX ADE63392;

DT 29-JAN-2004 (first entry)

DE Rat Protein P10247, SEQ ID NO 9331.

XX Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KM chronic constriction injury; CCI; spared nerve injury; SNI; Chung.

XX Rattus norvegicus.

PN W02003016475-A2.

PD 27-FEB-2003.

PF 14-AUG-2002; 2002WO-US025765.

PR 14-AUG-2001; 2001US-0312147P.

PR 01-NOV-2001; 2001US-0346382P.

PR 26-NOV-2001; 2001US-0333347P.

XX (GEHO) GEN HOSPITAL CORP.

PA (FARB) BAYER AG.

PI Woolf C, D'Urso D, Befort K, Costigan M;

DR WPI; 2003-268312/26.

XX GENBANK; P10247.

XX New composition comprising two or more isolated polypeptides, useful for

XX preparing a medicament for treating pain in an animal.

XX Claim 1; Page: 1017pp; English.

XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a rat protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 280 AA;

Query Match 100.0%; Score 25; DB 7; Length 280;
Best Local Similarity 50.0%; Pred. No. 6.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XXXXXHI 8
:|::|::|
Db 197 COBEVSHI 204

RESULT 161

ADBE63388 standard; protein; 280 AA.

XX ADE63388;

XX 29-JAN-2004 (first entry)

XX Rat Protein P10247, SEQ ID NO 9327.

XX Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;

KW chronic constriction injury; CCI; spared nerve injury; SNI; Chung.

XX Rattus norvegicus.

XX WO2003016475-A2.

XX 27-FEB-2003.

XX 14-AUG-2002; 2002WO-US025765.

XX 14-AUG-2001; 2001US-0312147P.

PR 01-NOV-2001; 2001US-0346382P.

PR 26-NOV-2001; 2001US-0333347P.

XX (GEHO) GEN HOSPITAL CORP.

XX (FARB) BAYER AG.

XX WOOLF C, D'urso D, Befort K, Costigan M;

XX WPI; 2003-268312/26.

XX GENBANK; P10247.

PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.
XX Claim 1; Page; 1017pp; English.

XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a rat protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 280 AA;

Query Match 100.0%; Score 25; DB 7; Length 280;
Best Local Similarity 50.0%; Pred. No. 6.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 1 XXXXXHI 8
:|::|::|
Db 197 COBEVSHI 204

RESULT 162

ADBE63458 standard; protein; 280 AA.

XX ADE63458;

XX 29-JAN-2004 (first entry)

XX Rat Protein CAA32468, SEQ ID NO 9397.

XX Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;

KW chronic constriction injury; CCI; spared nerve injury; SNI; Chung.

XX Rattus norvegicus.

XX WO2003016475-A2.

XX 27-FEB-2003.

XX 14-AUG-2002; 2002WO-US025765.

XX 14-AUG-2001; 2001US-0312147P.

PR 01-NOV-2001; 2001US-0346382P.

PR 26-NOV-2001; 2001US-0333347P.

XX (GEHO) GEN HOSPITAL CORP.

XX (FARB) BAYER AG.

XX WOOLF C, D'urso D, Befort K, Costigan M;

XX WPI; 2003-268312/26.

XX GENBANK; P10247.

XX MPI: 2003-268312/26.
 DR GENBANK: CAA32468.
 XX
 XX
 PT New composition comprising two or more isolated polypeptides, useful for
 PT preparing a medicament for treating pain in an animal.
 XX
 PS Claim 1; Page: 1017pp; English.
 XX
 CC The invention discloses a composition comprising two or more isolated rat
 CC or human polynucleotides or a polynucleotide which represents a fragment,
 CC derivative or allelic variation of the nucleic acid sequence. Also
 CC claimed are a vector comprising the novel polynucleotide, a host cell
 CC comprising the vector, a method for identifying a nucleotide sequence
 CC which is differentially regulated in an animal subjected to pain and a
 CC kit to perform the method, an array, a method for identifying an agent
 CC that increases or decreases the expression of the polynucleotide sequence
 CC that is differentially expressed in neuronal tissue of a first animal
 CC subjected to pain, a method for identifying a compound which regulates
 CC the expression of a polynucleotide sequence which is differentially
 CC expressed in an animal subjected to pain, a method for identifying a
 CC compound that regulates the activity of one or more of the
 CC polynucleotides, a method for producing a pharmaceutical composition, a
 CC method for identifying a compound or small molecule that regulates the
 CC activity in an animal of one or more of the polypeptides given in the
 CC specification, a method for identifying a compound useful in treating
 CC pain and a pharmaceutical composition comprising the one or more
 CC polypeptides or their antibodies. The polynucleotide or the compound that
 CC modulates its activity is useful for preparing a medicament for treating
 CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
 CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
 CC therapy). The sequence presented is a rat protein (shown in Table 2 of
 CC the specification) which is differentially expressed during pain. Note:
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic form directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.
 XX
 SQ Sequence 280 AA;
 Query Match 100.0%; Score 25; DB 7; Length 280;
 Best Local Similarity 50.0%; Pred. No. 6.2e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QXXXVXHH 8
 Db 197 QQEVSHI 204
 RESULT 163
 ADE63396
 ID ADE63396 standard; protein: 280 AA.
 XX
 AC ADE63396;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Rat Protein P10247, SEQ ID NO 9335.
 XX
 KW Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
 KW chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
 XX
 OS Rattus norvegicus.
 XX
 PN WO2003016475-A2.
 XX
 PD 27-FEB-2003.
 XX
 PF 14-AUG-2002; 2002WO-US025765.
 XX
 PR 14-AUG-2001; 2001US-0312147P.
 PR 01-NOV-2001; 2001US-0346382P.
 PR 26-NOV-2001; 2001US-0333347P.
 XX

PA (GENO) GEN HOSPITAL CORP.
 PA (FARB) BAYER AG.
 XX
 XX
 PI Woolf C, D'Urso D, Befort K, Costigan M;
 XX
 DR MPI: 2003-268312/26.
 DR GENBANK: P10247.
 XX
 PT New composition comprising two or more isolated polypeptides, useful for
 PT preparing a medicament for treating pain in an animal.
 XX
 PS Claim 1; Page: 1017pp; English.
 XX
 CC The invention discloses a composition comprising two or more isolated rat
 CC or human polynucleotides or a polynucleotide which represents a fragment,
 CC derivative or allelic variation of the nucleic acid sequence. Also
 CC claimed are a vector comprising the novel polynucleotide, a host cell
 CC comprising the vector, a method for identifying a nucleotide sequence
 CC which is differentially regulated in an animal subjected to pain and a
 CC kit to perform the method, an array, a method for identifying an agent
 CC that increases or decreases the expression of the polynucleotide sequence
 CC that is differentially expressed in neuronal tissue of a first animal
 CC subjected to pain, a method for identifying a compound which regulates
 CC the expression of a polynucleotide sequence which is differentially
 CC expressed in an animal subjected to pain, a method for identifying a
 CC compound that regulates the activity of one or more of the
 CC polynucleotides, a method for producing a pharmaceutical composition, a
 CC method for identifying a compound or small molecule that regulates the
 CC activity in an animal of one or more of the polypeptides given in the
 CC specification, a method for identifying a compound useful in treating
 CC pain and a pharmaceutical composition comprising the one or more
 CC polypeptides or their antibodies. The polynucleotide or the compound that
 CC modulates its activity is useful for preparing a medicament for treating
 CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
 CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
 CC therapy). The sequence presented is a rat protein (shown in Table 2 of
 CC the specification) which is differentially expressed during pain. Note:
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic form directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.
 CC
 XX
 SQ Sequence 280 AA;
 Query Match 100.0%; Score 25; DB 7; Length 280;
 Best Local Similarity 50.0%; Pred. No. 6.2e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QXXXVXHH 8
 Db 197 QQEVSHI 204
 RESULT 164
 ADE63462
 ID ADE63462 standard; protein: 280 AA.
 XX
 AC ADE63462;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Rat Protein CAA32468, SEQ ID NO 9401.
 XX
 KW Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
 KW chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
 XX
 OS Rattus norvegicus.
 XX
 PN WO2003016475-A2.
 XX
 PD 27-FEB-2003.
 XX
 PF 14-AUG-2002; 2002WO-US025765.
 XX

PR 14-AUG-2001; 2001US-0312147P.
PR 01-NOV-2001; 2001US-0346382P.
PR 26-NOV-2001; 2001US-0333347P.
XX
PA (GEHO) GEN HOSPITAL CORP.
PA (FARB) BAYER AG.
PI Woolf C, D'urso D, Befort K, Costigan M;
XX WPI; 2003-266312/26.
DR GENBANK; CAA32468.
XX
PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.
XX
PS Claim 1; Page; 1017p; English.
XX
CC The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
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CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
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CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI) in an animal (e.g. gene
CC therapy). The sequence presented is a rat protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 280 AA;
Query Match 100.0%; Score 25; DB 7; Length 280;
Best Local Similarity 50.0%; Pred. No. 6.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXXXVXHI 8
Db 197 QQEVSHI 204
RESULT 165
ADD46359
ID ADD46359 standard; protein; 280 AA.
XX
AC ADD46359;
XX
DT 29-JAN-2004 (first entry)
XX
DE Rat Protein P10247, SEQ ID NO 12037.
XX
XX Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KM chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
XX
OS Rattus norvegicus.
XX
XX WO2003016475-A2.
XX

PD 27-FEB-2003.
XX
XX 14-AUG-2002; 2002MO-US025765.
PE
XX
PR 14-AUG-2001; 2001US-0312147P.
PR 01-NOV-2001; 2001US-0346382P.
PR 26-NOV-2001; 2001US-0333347P.
XX
PA (GEHO) GEN HOSPITAL CORP.
PA (FARB) BAYER AG.
PI Woolf C, D'urso D, Befort K, Costigan M;
XX WPI; 2003-266312/26.
DR GENBANK; P10247.
XX
PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.
XX
PS Claim 1; Page; 1017p; English.
XX
CC The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI) in an animal (e.g. gene
CC therapy). The sequence presented is a rat protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 280 AA;
Query Match 100.0%; Score 25; DB 7; Length 280;
Best Local Similarity 50.0%; Pred. No. 6.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXXXVXHI 8
Db 197 QQEVSHI 204
RESULT 166
AAG13272
ID AAG13272 standard; protein; 281 AA.
XX
AC AAG13272;
XX
XX 17-OCT-2000 (first entry)
DT
XX Arabidopsis thaliana protein fragment SEQ ID NO: 12708.
DE
XX Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.
XX

XX Arabidopsis thaliana.
OS
XX EPI033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130448P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137502P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139452P.
PR 17-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139763P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140695P.
PR 26-JUN-1999; 99US-0140823P.

PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 01-JUL-1999; 99US-0142154P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
PR 16-JUL-1999; 99US-0144085P.
PR 16-JUL-1999; 99US-0144086P.
PR 19-JUL-1999; 99US-0144335P.
PR 20-JUL-1999; 99US-0144332P.
PR 20-JUL-1999; 99US-0144632P.
PR 20-JUL-1999; 99US-0144884P.
PR 21-JUL-1999; 99US-0144814P.
PR 21-JUL-1999; 99US-0145086P.
PR 22-JUL-1999; 99US-0145088P.
PR 22-JUL-1999; 99US-0145087P.
PR 22-JUL-1999; 99US-0145089P.
PR 22-JUL-1999; 99US-0145192P.
PR 23-JUL-1999; 99US-0145145P.
PR 23-JUL-1999; 99US-0145218P.
PR 23-JUL-1999; 99US-0145224P.
PR 26-JUL-1999; 99US-0145276P.
PR 27-JUL-1999; 99US-0145291P.
PR 27-JUL-1999; 99US-0145918P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
PR 02-AUG-1999; 99US-0146388P.
PR 03-AUG-1999; 99US-0146389P.
PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 04-AUG-1999; 99US-0147302P.
PR 05-AUG-1999; 99US-0147182P.
PR 05-AUG-1999; 99US-0147260P.
PR 06-AUG-1999; 99US-0147303P.
PR 06-AUG-1999; 99US-0147416P.
PR 09-AUG-1999; 99US-0147493P.
PR 09-AUG-1999; 99US-0147935P.
PR 10-AUG-1999; 99US-0148171P.
PR 11-AUG-1999; 99US-0148319P.
PR 12-AUG-1999; 99US-0148314P.
PR 13-AUG-1999; 99US-0148565P.
PR 13-AUG-1999; 99US-0148664P.
PR 16-AUG-1999; 99US-0149358P.
PR 17-AUG-1999; 99US-0149175P.
PR 18-AUG-1999; 99US-0149426P.
PR 20-AUG-1999; 99US-0149732P.
PR 20-AUG-1999; 99US-0149733P.
PR 20-AUG-1999; 99US-0149939P.
PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
PR 27-AUG-1999; 99US-0151066P.
PR 30-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.

PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
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XX 18-OCT-2000 (first entry)

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XX Protein identification: signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.

XX Arabidopsis thaliana.

XX EPI033405-A2.

XX 06-SEP-2000.

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Db 65 SQRKXNH 72

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DT 20-NOV-2003 (first entry)
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KW Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis;
KW enzymatic assay; antibiotic target.
XX
OS Staphylococcus aureus.
XX
PN MO200294868-A2.
XX
PD 28-NOV-2002.
XX
PF 27-MAR-2002; 2002MO-IB002637.
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AC AAG29597;
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DT 17-OCT-2000 (first entry)
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KM Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EPI03405-A2.
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Best Local Similarity 50.0%; Pred. No. 6.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 QXXXVXHI 8
Db 88 PQECTSHI 95

RESULT 172
ABM68471
ID ABM68471 standard; protein; 285 AA.
XX
XX ABM68471;
AC
XX
DT 20-NOV-2003 (first entry)
XX
XX Photobhabdus luminescens protein sequence #1568.
XX
XX Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
XX detection; food; gene expression; plant; animal; microorganism; toxin;
XX antibiotic; biopesticide; virulence factor; disease model; plague;
XX whooping cough.
XX
XX Photobhabdus luminescens.
OS
XX
XX W020294867-A2.
XX
XX 28-NOV-2002.
PD
XX
XX 07-FEB-2002; 2002WO-1B003040.
PP
XX
XX 07-FEB-2001; 2001FR-00001659.
PR
XX
XX (INSP ) INST PASTEUR.
PA (CNRS ) CNRS CENT NAT RECH SCI.
PA
XX
XX Duchaud E, Taourit S, Glaser P, Frangeul L, Kunet F, Danchin A;
PI Buchrieser C;
XX
XX WPI; 2003-148459/14.
XX
XX Genomic sequence of Photobhabdus luminescens and encoded polypeptides,
PT useful e.g. as therapeutic antimicrobials and agricultural pesticides.
PS
XX
XX Claim 2; SEQ ID NO 1568; 1205bp; French.
XX
XX The invention relates to the isolation of genes and their encoded
XX proteins from Photobhabdus luminescens. The isolated sequences are
XX sources of probes and primers for detecting the genome of P. luminescens
XX and related species; to study polymorphisms; for gene analysis and for
XX detection/amplification of the genes. Antibodies (Ab) raised against the
XX polypeptides encoded by the genes are used for detection/identification
XX of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that
XX carry a gene-containing vector are used to select compounds that
XX modulate, regulate, induce or inhibit expression of the genes in plants,
XX animals or microorganisms other than P. luminescens and are able to alter
XX response or sensitivity to toxins and antibiotics produced by P.
XX luminescens. Cells transformed to express the genes are useful for
XX recombinant production of the proteins, particularly toxins and
XX antibacterials useful as insecticides, bactericides and fungicides. The
XX genes, proteins, vectors containing the genes and Ab are also useful
XX therapeutically (to treat microbial infection by bacteria or fungi that
XX are sensitive to P. luminescens-encoded toxins or antibiotics) and as
XX biopesticides. Other uses of the genes and the proteins are as virulence
XX factors and for identifying targets of human diseases for which P.
XX luminescens is a model (particularly plague and whooping cough). This
XX sequence represents one of the isolated P. luminescens proteins
XX
XX Sequence 285 AA:

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Query Match 100.0%; Score 25; DB 6; Length 285;
Best Local Similarity 50.0%; Pred. No. 6.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHI 8
:|::|::|
Db 1 MOQRVSHI 8

RESULT 173

ABR41580 standard; protein; 285 AA.

XX ABR41580;

DT 02-JUN-2003 (first entry)

DE Human DTHP antigen recognition protein.

XX Human; dthp; diagnostic and therapeutic polynucleotide; diagnosis;
KM cancer; cell proliferative disorder; autoimmune disorder;
KM inflammatory disorder; infection; hormonal disorder; metabolic disorder;
KM neurological disorder; gastrointestinal disorder; transport disorder;
KM connective tissue disorder; drug screening; proteome analysis;
KM gene therapy; antisense therapy; genotyping; transgenic animal; knock in;
KM disease model; toxicological testing; transcript imaging;
KM antigen recognition.

XX Homo sapiens.

PN W0200297031-A2.

PD 05-DEC-2002.

PF 27-MAR-2002; 2002WO-US010056.

PR 28-MAR-2001; 2001US-0279619P.

PR 29-MAR-2001; 2001US-0280067P.

PR 29-MAR-2001; 2001US-0280068P.

PR 16-MAY-2001; 2001US-0291280P.

PR 17-MAY-2001; 2001US-0291829P.

PR 17-MAY-2001; 2001US-0291849P.

PR 19-JUN-2001; 2001US-0299428P.

PR 20-JUN-2001; 2001US-0299776P.

XX 20-JUN-2001; 2001US-0300001P.

XX (INCY-) INCYTE GENOMICS INC.

XX Daffo A, Jones AL, Tran AB, Dahl CR, Gietzen D, Chinn J;

PI Dufour GE, Hillman JL, Yu JY, Tuason O, Yap PE, Amshay SR;

PI Daugherty SC, Dam TC, Liu TF, Nguyen DA, Kleefeld Y, Gerstin EH;

PI Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris B;

PI Flores V, Marwaha R, Lo A, Lam RY, Uraahka ME;

XX WPI; 2003-129518/12.

DR N-PSDB; ACC46518.

XX Novel human diagnostic and therapeutic polypeptide useful for identifying

PT test compound which specifically binds to a polypeptide encoded by human

PT diagnostic and therapeutic polynucleotide, and to induce antibodies.

XX Claim 27; SEQ ID NO 1115; 591bp; English.

CC for compounds which specifically bind a DTHP protein; and methods of
CC assessing the toxicity of test compounds using a dthp hybridisation
CC probe. Dthp nucleic acid sequences and DTHP proteins may be used in the
CC diagnosis of a wide variety of conditions including cancer and other cell
CC proliferative disorders; autoimmune or inflammatory disorders; bacterial,
CC viral, fungal or parasitic infections; hormonal disorders; metabolic
CC disorders; neurological disorders; gastrointestinal disorders; transport
CC disorders; and connective tissue disorders. They may also be used to
CC screen for modulators of protein activity or gene expression. DTHP
CC proteins can additionally be used in analysis of the proteome of a tissue
CC or cell type and to induce antibodies. The dthp nucleic acids are
CC additionally useful in somatic or germline gene therapy of the disorders
CC mentioned above, as a source of antisense sequences, as a source of
CC probes and primers, in genotyping and identification of individuals, in
CC the generation of transgenic animal models of human disease or knock in
CC humanised animals, in toxicological testing, and in transcript imaging.
CC The present sequence represents a DTHP protein which has antigen
CC recognition activity. Note: The sequence data for this patent did not
CC form part of the printed specification, but was obtained in electronic
CC format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX Sequence 285 AA;

QY 1 XQXXVXHI 8
:|::|::|
Db 72 FQGRVSHI 79

RESULT 174

AAG38076 standard; protein; 287 AA.

XX AAG38076;

DT 18-OCT-2000 (first entry)

DE Arabidopsis thaliana protein fragment SEQ ID NO: 46919.

XX Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.

XX Arabidopsis thaliana.

PN EP1033405-A2.

PD 06-SEP-2000.

PF 25-FEB-2000; 2000EP-00301439.

PR 25-FEB-1999; 99US-0121825P.

PR 05-MAR-1999; 99US-0123180P.

PR 09-MAR-1999; 99US-0123548P.

PR 23-MAR-1999; 99US-0125788P.

PR 25-MAR-1999; 99US-0126264P.

PR 29-MAR-1999; 99US-0126785P.

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PR 06-APR-1999; 99US-0128234P.

PR 08-APR-1999; 99US-0128714P.

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PR 23-APR-1999; 99US-0130510P.

PR 23-APR-1999; 99US-0130891P.

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PR 30-APR-1999; 99US-0132048P.

PR 30-APR-1999; 99US-0132407P.

PR 04-MAY-1999; 99US-0132484P.

PR 05-MAY-1999; 99US-0132485P.

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PR 29-SEP-1999; 99US-0156596P.
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PR 05-OCT-1999; 99US-0157753P.
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PR 13-OCT-1999; 99US-0159295P.
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PR 14-OCT-1999; 99US-0159330P.
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PR 21-OCT-1999; 99US-0160770P.
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PR 22-OCT-1999; 99US-0160981P.
PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161922P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match Best Local Similarity 100.0%; Score 25; DB 3; Length 287;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
Db 240 KQPDVLIH 247

RESULT 175
ABG15271
ID ABG15271 standard; protein; 289 AA.
XX
AC ABG15271;
XX
DT 18-FEB-2002 (first entry)
XX
DE Novel human diagnostic protein #15262.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KM food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US008631.
XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Dermanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
XX
DR N-PSDB; AAS79458.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity.
XX
PS Claim 20; SEQ ID NO 45630; 103bp; English.
XX
CC The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging

CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 289 AA;

Query Match Best Local Similarity 100.0%; Score 25; DB 4; Length 289;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
Db 8 SQFVIEHI 15

RESULT 176
AAG82170
ID AAG82170 standard; protein; 292 AA.
XX
AC AAG82170;
XX
DT 03-SEP-2001 (first entry)
XX
DE S. epidermidis open reading frame protein sequence SEQ ID NO:1434.
XX
KW Staphylococcus epidermidis SRI strain; infection; diagnosis; vaccination;
KM endocarditis.
XX
OS Staphylococcus epidermidis.
XX
PN WO200134809-A2.
XX
PD 17-MAY-2001.
XX
PF 09-NOV-2000; 2000WO-US030782.
XX
PR 09-NOV-1999; 99US-0164258P.
XX
PA (GLAX) GLAXO GROUP LTD.
XX
PI Kimmexly WJ;
XX
XX
DR WPI; 2001-316495/33.
XX
DR N-PSDB; AAH53020.
XX
PT Nucleic acids encoding polypeptides from Staphylococcus epidermidis,
PT useful for vaccinating against infections, e.g. endocarditis.
XX
PS Claim 18; Page 406; 2188bp; English.
XX
CC AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
CC (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis. (I)
CC and (II) can have antibacterial activity and therefore can be used in
CC vaccination. The nucleic acids (I) may be used to produce the S.
CC epidermidis polypeptides (II) via the production of vectors containing
CC them which are used to produce hosts cells which express the
CC polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
CC used to vaccinate subjects and to raise antibodies against the bacteria.
CC The polypeptides may also be used to assay for other inhibitors of their
CC activity and therefore identify compounds that may be used for the
CC treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
CC AAH55090 represent specifically claimed S. epidermidis genomic DNA
CC polynucleotide sequences from the present invention. AAH55091 to AAH55098
CC represent oligonucleotide sequences and primers which are used in the
CC exemplification of the present invention. N.B. The present invention

specifically claims all the polynucleotide sequences given in the sequence listing of the present specification, however the sequence listing only goes up to SEQ ID NO:4454 so even though sequences are given in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present for SEQ ID NO:4455 to 4464

Sequence 292 AA;

Query Match 100.0%; Score 25; DB 4; Length 292;

Best Local Similarity 50.0%; Pred. No. 6.6e+03; Mismatches 0; Indels 0; Gaps 0;

Matches 4; Conservative 0; Indels 0; Gaps 0;

1 XQXXVXHI 8
: : : : :
39 IQGFVRHI 46

RESULT 177

ABM73000

ID ABM73000 standard; protein; 292 AA.

AC ABM73000;

DT 20-NOV-2003 (first entry)

DE Staphylococcus aureus protein #2240.

KW Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis; enzymatic assay; antibiotic target.

OS Staphylococcus aureus.

PN MO200294868-A2.

PD 28-NOV-2002.

PF 27-MAR-2002; 2002MO-IB002637.

PR 27-MAR-2001; 2001GB-00007661.

PA (CHIR-) CHIRON SPA.

PI Maignani V, Mora M, Scarselli M;

WP1; 2003-120786/11.

DR N-PSDB; ACF74560.

PT New Staphylococcus aureus protein, useful as a vaccine for treating or preventing Staphylococcal infection, specifically an infection caused by

S. aureus, e.g. sepsis.

Claim 1; SEQ ID NO 4480; 49pp; English.

The invention relates to novel genes and encoded proteins from Staphylococcus aureus. A composition comprising the S. aureus protein, a nucleic acid encoding the protein, or an antibody to the protein, is useful as a pharmaceutical, particularly as a vaccine for treating or preventing infection due to Staphylococcus bacteria, specifically an infection caused by S. aureus. The composition is particularly useful for treating or preventing sepsis in a patient. The composition can also be used for diagnostics. The protein is also used in an assay for enzymatic studies and as a target for antibiotics. This sequence represents one of the novel S. aureus proteins of the invention

Sequence 292 AA;

Query Match 100.0%; Score 25; DB 6; Length 292;

Best Local Similarity 50.0%; Pred. No. 6.6e+03; Mismatches 0; Indels 0; Gaps 0;

Matches 4; Conservative 0; Indels 0; Gaps 0;

1 XQXXVXHI 8
: : : : :
39 IQGFVRHI 46

RESULT 178

ADB08044

ID ADB08044 standard; protein; 295 AA.

AC ADB08044;

DT 20-NOV-2003 (first entry)

DE Alloicoccus otilis antigenic protein SEQ ID NO:1984.

KW Alloicoccus otilidis; antigenic protein; immunogenic; immunisation; gene therapy; Gram-positive bacterium; infection.

OS Alloicoccus otilis.

PN MO2003048304-A2.

PD 12-JUN-2003.

PF 25-NOV-2002; 2002MO-US036123;

PR 29-NOV-2001; 2001US-0333777P.

PR 18-NOV-2002; 2002US-0426742P.

PA (AMHP) WYETH HOLDINGS CORP.

PI Fletcher LD, McMichael JC, Russell DP, Zagursky RJ;

WP1; 2003-505284/47.

DR N-PSDB; ADB08043.

PT New Alloicoccus otilidis polynucleotides and polypeptides, useful for treating and diagnosing diseases, drug screening assays and monitoring of effects during drug clinical trials.

Claim 33; SEQ ID NO 1984; 1019pp; English.

The present invention describes an isolated polynucleotide (1) of Alloicoccus otilidis genomic DNA, which encodes an antigenic protein. Alloicoccus otilidis is a Gram-positive bacterium. Also described: (1) an isolated polypeptide that is encoded by the polynucleotide (1); (2) an expression vector comprising the novel isolated polynucleotide (1), its complement, degenerate variant or fragment; (3) a genetically engineered host cell, transfected, transformed or infected with the vector of (2); (4) an antibody specific for the polypeptide of (1); (5) an immunogenic composition comprising the polypeptide, its complement, biological equivalent or fragment, or the polynucleotide that is comprised in the expression vector; (6) a pharmaceutical composition comprising the polypeptide of (1) and a carrier; (7) a protein chip comprising an array of the polypeptides of (1), their biological equivalent or fragment; (8) CC immunising against Alloicoccus otilidis by administering to a host the immunogenic composition; (9) detecting and/or identifying Alloicoccus otilidis in the biological sample; (10) a kit comprising a container containing the novel polynucleotide, its degenerate variant or fragment, or the antibody of (4); and (11) producing a polypeptide by culturing the genetically engineered host cell under conditions suitable to produce the polypeptide from the culture. (1) can be used in gene therapy. The polynucleotides, polypeptides, antibodies and compositions of the present invention can be used for treating and diagnosing diseases, drug screening assays and monitoring of effects during drug clinical trials. The polynucleotides are useful for expressing and detecting Alloicoccus otilidis. The present sequence represents an Alloicoccus otilidis antigen protein from the present invention.

Sequence 295 AA;

Query Match 100.0%; Score 25; DB 6; Length 295;

Best Local Similarity 50.0%; Pred. No. 6.6e+03; Mismatches 0; Indels 0; Gaps 0;

Matches 4; Conservative 0; Indels 0; Gaps 0;

1 XQXXVXHI 8
: : : : :
39 IQGFVRHI 46

Db 274 SQDGVAMI 281
:|::|:|

RESULT 179

AAV39883
ID AAV39883 standard; peptide; 296 AA.

AC AAV39883;

DT 07-DEC-1999 (first entry)

DE MHC Class II p41 specific region.

XX Asparaginyl endopeptidase; AEP; inhibitor; immune response modulation;
KM Class II MHC molecule; major histocompatibility complex; coeliac disease;
KM antigenic peptide; autoimmune disease; rheumatoid arthritis; therapy;
KM insulin-dependent diabetes mellitus; multiple sclerosis; Grave's disease;
KM Hashimoto's thyroiditis; myasthenia gravis; pemphigus vulgaris;
KM systemic lupus erythematosus; allergic reaction; transplant surgery;
KM hypersensitivity reaction.

OS Homo sapiens.

PN WO9948910-A1.

PD 30-SEP-1999.

PF 26-MAR-1999; 99WO-GB000963.

PR 26-MAR-1998; 98GB-00006442.

PR 28-MAY-1998; 98US-0086966P.

PA (UYDU-) UNIV DUNDEE.

PI Watts C;

DR WPI; 1999-580415/49.

PT Use of asparaginyl endopeptidase inhibitors as modulators of immune
PT response for treating autoimmune diseases, allergic or hypersensitivity
PT reactions or transplant rejection.

PS Disclosure; Page 5; 93pp; English.

XX This sequence represents the p41 specific region of the class II MHC
CC invariant chain, and is a substrate for asparaginyl endopeptidase (AEP).
CC The invention relates to a method for modulating the immune response of a
CC patient by administering to the patient an inhibitor of AEP. The AEP
CC inhibitors can reduce the competency of Class II MHC molecules for
CC binding antigenic peptides and reduce the presentation of antigenic
CC peptides by Class II MHC molecules. The methods can be used for treating
CC a patient who has, or is at risk of a disease involving MHC Class II
CC molecules such as an autoimmune disease, e.g. rheumatoid arthritis,
CC insulin-dependent diabetes mellitus, multiple sclerosis, Hashimoto's
CC thyroiditis, coeliac disease, myasthenia gravis, pemphigus vulgaris,
CC systemic lupus erythematosus or Grave's disease. The inhibitors can also
CC be used to treat a patient who has or is at risk of an allergic or
CC hypersensitivity reaction or a patient who has or is to undergo a
CC transplant surgery

CC Sequence 296 AA;

SQ Query Match 100.0%; Score 25; DB 2; Length 296;

Best Local Similarity 50.0%; Pred. No. 6.7e+03;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
:|::|:|
Db 213 QQEVSHI 220

RESULT 180

ABU05274
ID ABU05274 standard; protein; 296 AA.

AC ABU05274;

DT 29-JAN-2003 (first entry)

DE Human expressed protein tag (EPT) #1940.

XX Translational profiling; expressed protein tag; EPT; kinase; phosphatase;
KM protease; protease inhibitor; transporter; cytoskeletal protein;
KM receptor; transcription factor; cancer; MHC;
KM major histocompatibility complex; myeloma; colon cancer; gastric cancer;
KM adenocarcinoma; sarcoma; melanoma; lymphoma; leukemia.

OS Homo sapiens.

PN WO200278524-A2.

PD 10-OCT-2002.

PF 28-MAR-2002; 2002WO-US009671.

PR 28-MAR-2001; 2001US-0279495P.

PR 21-MAY-2001; 2001US-0292544P.

PR 08-AUG-2001; 2001US-0310801P.

PR 01-OCT-2001; 2001US-0326370P.

PR 04-DEC-2001; 2001US-0336780P.

PR 20-FEB-2002; 2002US-0358985P.

PA (ZYCO-) ZYCOS INC.

PI Chicz RM, Tomlinson AJ, Urban RG;

DR WPI; 2003-040607/03.

PT New polypeptides (e.g. kinases, phosphatases, proteases, transporters,
PT cytoskeletal proteins, receptors or transcription factors), useful for
PT treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
PT leukemia.

PS Example 2; SEQ ID NO 1940; 134pp; English.

XX The invention describes a purified polypeptide, which comprises a
CC fragment of a kinase, phosphatase, protease, protease inhibitor,
CC transporter, cytoskeletal protein, receptor or transcription factor. The
CC polypeptide is useful as an immunogenic composition for eliciting in a
CC mammal an immunogenic response directed against any of the purified
CC polypeptide. The purified polypeptide, or the antibody that binds to this
CC polypeptide, is useful for treating cancer. The polypeptide is also
CC useful for identifying compounds that binds to a naturally processed
CC Class I or class II MHC-binding polypeptide. The polypeptides and
CC polynucleotides are particularly useful for treating or preventing
CC myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,
CC lymphoma or leukemia. These are also useful for screening agents for
CC treating the above mentioned diseases. This sequence represents an
CC expressed protein tag (EPT) isolated from human tissue for translational
CC profiling. Note: This sequence does not appear in the printed
CC specification but was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

CC Sequence 296 AA;

SQ Query Match 100.0%; Score 25; DB 6; Length 296;

Best Local Similarity 50.0%; Pred. No. 6.7e+03;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XQXXVXHI 8
:|::|:|
Db 213 QQEVSHI 220

RESULT 181

ABU07242
ID ABU07242 standard; protein; 296 AA.
XX AC ABU07242;
XX DT 29-JAN-2003 (first entry)
XX DE Human expressed protein tag (EPT) #1943.
XX KW Translational profiling; expressed protein tag; EPT; kinase; phosphatase;
XX KW protease; protease inhibitor; transporter; cytoskeletal protein;
XX KW receptor; transcription factor; cancer; MHC;
XX KW major histocompatibility complex; myeloma; colon cancer; gastric cancer;
XX KW adenocarcinoma; sarcoma; melanoma; lymphoma; leukemia.
XX OS Homo sapiens.
XX PN WO200278524-A2.
XX PD 10-OCT-2002.
XX PF 28-MAR-2002; 2002WO-US009671.
XX PR 28-MAR-2001; 2001US-0279495P.
XX PR 21-MAY-2001; 2001US-0292544P.
XX PR 08-AUG-2001; 2001US-0310801P.
XX PR 01-OCT-2001; 2001US-0326370P.
XX PR 04-DEC-2001; 2001US-0336780P.
XX PR 20-FEB-2002; 2002US-0358985P.
XX PA (ZYCO-) ZYCO INC.
XX PI Chicz RM, Tomlinson AJ, Urban RG;
XX DR WPI; 2003-040607/03.
XX DT New polypeptides (e.g. kinases, phosphatases, proteases, transporters,
XX PT cytoskeletal proteins, receptors or transcription factors), useful for
XX PT treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
XX PT leukemia.
XX PS Example 2; SEQ ID NO 1943; 134pp; English.
XX CC The invention describes a purified polypeptide, which comprises a
XX CC fragment of a kinase, phosphatase, protease, protease inhibitor,
XX CC transporter, cytoskeletal protein, receptor or transcription factor. The
XX CC polypeptide is useful as an immunogenic composition for eliciting in a
XX CC mammal an immunogenic response directed against any of the purified
XX CC polypeptide. The purified polypeptide, or the antibody that binds to this
XX CC polypeptide, is useful for treating cancer. The polypeptide is also
XX CC useful for identifying compounds that binds to a naturally processed
XX CC class I or class II MHC-binding polypeptide. The polypeptides and
XX CC polynucleotides are particularly useful for treating or preventing
XX CC myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,
XX CC lymphoma or leukemia. These are also useful for screening agents for
XX CC treating the above mentioned diseases. This sequence represents an
XX CC expressed protein tag (EPT) isolated from human tissue for translational
XX CC profiling. Note: This sequence does not appear in the printed
XX CC specification but was obtained in electronic format directly from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 296 AA;
Query Match 100.0%; Score 25; DB 6; Length 296;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

ADE63460
ID ADE63460 standard; protein; 296 AA.
XX AC ADE63460;
XX DT 29-JAN-2004 (first entry)
XX DE Human Protein P04233, SEQ ID NO 9399.
XX KW Human; pain; neuronal tissue; gene therapy;
XX KW spinal segmental nerve injury; chronic constriction injury; CCI;
XX KW spared nerve injury; SNI; Chung.
XX OS Homo sapiens.
XX PN WO2003016475-A2.
XX PD 27-FEB-2003.
XX PF 14-AUG-2002; 2002WO-US025765.
XX PR 14-AUG-2001; 2001US-0312147P.
XX PR 01-NOV-2001; 2001US-0346382P.
XX PR 26-NOV-2001; 2001US-0333347P.
XX PA (GENO) GEN HOSPITAL CORP.
XX PA (PARR) BAYER AG.
XX PI Woolf C, D'urso D, Befort K, Costigan M;
XX DR WPI; 2003-268312/26.
XX DT GENBANK; P04233.
XX PT New composition comprising two or more isolated polypeptides, useful for
XX PT preparing a medicament for treating pain in an animal.
XX PS Claim 1; Page; 1017pp; English.
XX CC The invention discloses a composition comprising two or more isolated rat
XX CC or human polynucleotides or a polynucleotide which represents a fragment,
XX CC derivative or allelic variation of the nucleic acid sequence. Also
XX CC claimed are a vector comprising the novel polynucleotide, a host cell
XX CC comprising the vector, a method for identifying a nucleotide sequence
XX CC which is differentially regulated in an animal subjected to pain and a
XX CC kit to perform the method, an array, a method for identifying an agent
XX CC that increases or decreases the expression of the polynucleotide sequence
XX CC that is differentially expressed in neuronal tissue of a first animal
XX CC subjected to pain, a method for identifying a compound which regulates
XX CC the expression of a polynucleotide sequence which is differentially
XX CC expressed in an animal subjected to pain, a method for identifying a
XX CC compound that regulates the activity of one or more of the
XX CC polynucleotides, a method for producing a pharmaceutical composition, a
XX CC method for identifying a compound or small molecule that regulates the
XX CC activity in an animal of one or more of the polypeptides given in the
XX CC specification, a method for identifying a compound useful in treating
XX CC pain and a pharmaceutical composition comprising the one or more
XX CC polypeptides or their antibodies. The polynucleotide or the compound that
XX CC modulates its activity is useful for preparing a medicament for treating
XX CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
XX CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
XX CC therapy). The sequence presented is a human protein (shown in Table 2 of
XX CC the specification) which is differentially expressed during pain. Note:
XX CC The sequence data for this patent did not form part of the printed
XX CC specification, but was obtained in electronic form directly from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences.
XX SQ Sequence 296 AA;
Query Match 100.0%; Score 25; DB 7; Length 296;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Db 213 COBEVSHI 220

RESULT 183
ADE63398
ID ADE63398 standard; protein; 296 AA.

AC ADE63398;

DT 29-JAN-2004 (first entry)

DE Human Protein P04233, SEQ ID NO 9337.

XX Human; pain; neuronal tissue; gene therapy;
KM spinal segmental nerve injury; chronic constriction injury; CCI;
KW spared nerve injury; SNI; Chung.

OS Homo sapiens.

PN WO2003016475-A2.

PD 27-FEB-2003.

PF 14-AUG-2002; 2002WO-US025765.

PR 14-AUG-2001; 2001US-0312147P.

PR 01-NOV-2001; 2001US-0346382P.

PR 26-NOV-2001; 2001US-033347P.

PA (GEHO) GEN HOSPITAL CORP.

PA (FARB) BAYER AG.

PI Woolf C, D'urso D, Befort K, Costigan M;

DR WPI; 2003-268312/26.

DR GENBANK; P04233.

PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.

PS Claim 1; Page; 1017pp; English.

XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also

CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the

CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating

CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating

CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a human protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:

CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 296 AA;

XX

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XX

Query Match 100.0%; Score 25; DB 7; Length 296;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 1 XQXXVXHI 8
Db 213 COBEVSHI 220

RESULT 184

ADE63394
ID ADE63394 standard; protein; 296 AA.

AC ADE63394;

DT 29-JAN-2004 (first entry)

DE Human Protein P04233, SEQ ID NO 9333.

XX Human; pain; neuronal tissue; gene therapy;
KM spinal segmental nerve injury; chronic constriction injury; CCI;
KW spared nerve injury; SNI; Chung.

OS Homo sapiens.

PN WO2003016475-A2.

PD 27-FEB-2003.

PF 14-AUG-2002; 2002WO-US025765.

PR 14-AUG-2001; 2001US-0312147P.

PR 01-NOV-2001; 2001US-0346382P.

PR 26-NOV-2001; 2001US-033347P.

PA (GEHO) GEN HOSPITAL CORP.

PA (FARB) BAYER AG.

PI Woolf C, D'urso D, Befort K, Costigan M;

DR WPI; 2003-268312/26.

DR GENBANK; P04233.

PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.

PS Claim 1; Page; 1017pp; English.

XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also

CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the

CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating

CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating

CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a human protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:

CC The sequence data for this patent did not form part of the printed

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 296 AA;

SO Query Match 100.0%; Score 25; DB 7; Length 296;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHH 8
Db 213 QCEVSHI 220

RESULT 185

ADE63386
ID ADE63386 standard; protein; 296 AA.

XX ADE63386;

DT 29-JAN-2004 (first entry)

XX Human Protein P04233, SEQ ID NO 9325.

XX Human; pain; neuronal tissue; gene therapy;

KW spinal segmental nerve injury; chronic constriction injury; CCI;
spared nerve injury; SNI; Chung.

OS Homo sapiens.

PN WO2003016475-A2.

PD 27-FEB-2003.

PF 14-AUG-2002; 2002WO-US025765.

PR 14-AUG-2001; 2001US-0312147P.

PR 01-NOV-2001; 2001US-0346382P.

PR 26-NOV-2001; 2001US-0333347P.

PA (GEHO) GEN HOSPITAL CORP.

PA (FARB) BAYER AG.

PI Woolf C, D'Urso D, Befort K, Costigan M;

DR WPI; 2003-268312/26.

DR GENBANK; P04233.

XX Claim 1; Page; 1017p; English.

XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating

CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a human protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

SO Sequence 296 AA;

QY Query Match 100.0%; Score 25; DB 7; Length 296;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 XQXXVXHH 8
Db 213 QCEVSHI 220

RESULT 186

ADE63390
ID ADE63390 standard; protein; 296 AA.

XX ADE63390;

DT 29-JAN-2004 (first entry)

XX Human Protein P04233, SEQ ID NO 9329.

XX Human; pain; neuronal tissue; gene therapy;

KW spinal segmental nerve injury; chronic constriction injury; CCI;
spared nerve injury; SNI; Chung.

OS Homo sapiens.

PN WO2003016475-A2.

PD 27-FEB-2003.

PF 14-AUG-2002; 2002WO-US025765.

PR 14-AUG-2001; 2001US-0312147P.

PR 01-NOV-2001; 2001US-0346382P.

PR 26-NOV-2001; 2001US-0333347P.

PA (GEHO) GEN HOSPITAL CORP.

PA (FARB) BAYER AG.

PI Woolf C, D'Urso D, Befort K, Costigan M;

DR WPI; 2003-268312/26.

DR GENBANK; P04233.

XX Claim 1; Page; 1017p; English.

XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the

CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a human protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 296 AA;
QY Query Match 100.0%; Score 25; DB 7; Length 296;
Best Local Similarity 50.0%; Pred. No. 6.7e+03; Indels 0; Gaps 0;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Db 213 COSEVSHI 220
QY 1 XQXXVXHI 8
:|::|:|
ID ADD46361 standard; protein; 296 AA.
XX
AC ADD46361;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human Protein P04233, SEQ ID NO 12039.
XX
KW Human; pain; neuronal tissue; gene therapy;
KW spinal segmental nerve injury; chronic constriction injury; CCI;
KW spared nerve injury; SNI; Chung.
XX
OS Homo sapiens.
XX
PN WO2003016475-A2.
XX
PD 27-FEB-2003.
XX
PF 14-AUG-2002; 2002WO-US025765.
XX
PR 14-AUG-2001; 2001US-0312147P.
PR 01-NOV-2001; 2001US-0346382P.
PR 26-NOV-2001; 2001US-0333347P.
XX
PA (GEHO) GEN HOSPITAL CORP.
PA (FARB) BAYER AG.
XX
PI Woolf C, D'urso D, Befort K, Costigan M;
XX
DR WPI; 2003-268312/26.
DR GENBANK; P04233.
XX
PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.
XX
PS Claim 1; Page; 1017pp; English.
XX
CC The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates

CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC therapy). The sequence presented is a human protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 296 AA;
QY Query Match 100.0%; Score 25; DB 7; Length 296;
Best Local Similarity 50.0%; Pred. No. 6.7e+03; Indels 0; Gaps 0;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Db 213 COSEVSHI 220
QY 1 XQXXVXHI 8
:|::|:|
ID ADE63464 standard; protein; 296 AA.
XX
AC ADE63464;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human Protein P04233, SEQ ID NO 9403.
XX
KW Human; pain; neuronal tissue; gene therapy;
KW spinal segmental nerve injury; chronic constriction injury; CCI;
KW spared nerve injury; SNI; Chung.
XX
OS Homo sapiens.
XX
PN WO2003016475-A2.
XX
PD 27-FEB-2003.
XX
PF 14-AUG-2002; 2002WO-US025765.
XX
PR 14-AUG-2001; 2001US-0312147P.
PR 01-NOV-2001; 2001US-0346382P.
PR 26-NOV-2001; 2001US-0333347P.
XX
PA (GEHO) GEN HOSPITAL CORP.
PA (FARB) BAYER AG.
XX
PI Woolf C, D'urso D, Befort K, Costigan M;
XX
DR WPI; 2003-268312/26.
DR GENBANK; P04233.
XX
PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.
XX
PS Claim 1; Page; 1017pp; English.
XX
CC The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence

CC which is differentially regulated in an animal subjected to pain and a
 CC kit to perform the method, an array, a method for identifying an agent
 CC that increases or decreases the expression of the polynucleotide sequence
 CC that is differentially expressed in neuronal tissue of a first animal
 CC subjected to pain, a method for identifying a compound which regulates
 CC the expression of a polynucleotide sequence which is differentially
 CC expressed in an animal subjected to pain, a method for identifying a
 CC compound that regulates the activity of one or more of the
 CC polynucleotides, a method for producing a pharmaceutical composition, a
 CC method for identifying a compound or small molecule that regulates the
 CC activity in an animal of one or more of the polypeptides given in the
 CC specification, a method for identifying a compound useful in treating
 CC pain and a pharmaceutical composition comprising the one or more
 CC polypeptides or their antibodies. The polynucleotide or the compound that
 CC modulates its activity is useful for preparing a medicament for treating
 CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
 CC injury (CCI) and spared nerve injury (SNI) in an animal (e.g. gene
 CC therapy). The sequence presented is a human protein (shown in Table 2 of
 CC the specification) which is differentially expressed during pain. Note:
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic form directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 296 AA;

Query Match 100.0%; Score 25; DB 7; Length 296;

Best Local Similarity 50.0%; Pred. No. 6.7e+03; Indels 0; Gaps 0;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

1 QXQXVXMI 8

DB 213 QCEVSHI 220

RESULT 189

AA38784 ID AAY38784 standard; protein; 297 AA.

XX AAY38784;

XX 08-OCT-1999 (first entry)

DE Neisseria gonorrhoeae antigenic protein encoded by ORF138.

XX Neisseria meningitidis; Neisseria gonorrhoeae; antigen; vaccine;

XX treatment; Neisseria infection; meningitis; septicemia; gonorrhea.

OS Neisseria gonorrhoeae.

XX WO9924578-A2.

XX 20-MAY-1999.

XX 09-OCT-1998; 98WO-1B001665.

XX 06-NOV-1997; 97GB-00023516.

XX 14-NOV-1997; 97GB-00024190.

XX 18-NOV-1997; 97GB-00024386.

XX 27-NOV-1997; 97GB-00025158.

XX 10-DEC-1997; 97GB-00026147.

XX 14-JAN-1998; 98GB-00000759.

XX 01-SEP-1998; 98GB-00019016.

XX (CHIR-) CHIRON SPA.

XX Maignani V, Rappuoli R, Pizza M, Scarlato V, Grandi G;

XX MPI; 1999-327407/27.

XX N-PSDB; AA212219.

PS Claim 4; Page 328; 524pp; English.

XX Amino acid sequences AAY38499-Y38944 represent Neisseria meningitidis and

XX N. gonorrhoeae antigenic proteins. They are encoded by open reading

XX frames (ORFs) AA211972-212358. The antigenic proteins, their fragments,

XX their nucleic acids and antibodies are used for diagnosis, prevention (as

XX vaccines) or treatment of Neisseria infections, such as meningitis,

XX septicemia and gonorrhea. Both organisms are closely related. Fragments

XX of the nucleic acids are useful as hybridisation probes and antisense

XX reagents

XX Sequence 297 AA;

Query Match 100.0%; Score 25; DB 2; Length 297;

Best Local Similarity 50.0%; Pred. No. 6.7e+03; Indels 0; Gaps 0;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

1 QXQXVXMI 8

DB 247 QGFVLMH 254

RESULT 190

AA74947 ID AAY74947 standard; protein; 297 AA.

XX AAY74947;

XX 12-SEP-2003 (revised)

XX 21-MAR-2000 (first entry)

DE Neisseria gonorrhoeae ORF 505; protein sequence SEQ ID NO:1368.

XX Neisseria meningitidis; Neisseria gonorrhoeae; antigen; vaccine;

XX antigenic; diagnosis; immunogenic; infection; meningitis; septicemia;

XX antibacterial; gene therapy.

XX Neisseria gonorrhoeae.

XX WO9957280-A2.

XX 11-NOV-1999.

XX 30-APR-1999; 99WO-US009346.

XX 01-MAY-1998; 98US-0083758P.

XX 31-JUL-1998; 98US-0094869P.

XX 02-SEP-1998; 98US-0098994P.

XX 02-SEP-1998; 98US-0099062P.

XX 09-OCT-1998; 98US-0103749P.

XX 09-OCT-1998; 98US-0103794P.

XX 09-OCT-1998; 98US-0103796P.

XX 25-FEB-1999; 99US-0121528P.

XX (CHIR-) CHIRON CORP.

XX (GENO-) INST GENOMIC RES.

XX Fraser C, Galeotti C, Grandi G, Hickey E, Maignani V, Mora M;

XX Peteren J, Pizza M, Rappuoli R, Ratti G, Scarlato V, Scarselli M;

XX Tetteijn H, Venter JC;

XX MPI; 2000-062150/05.

XX N-PSDB; AA253709.

XX Novel Neisserial polypeptides predicted to be useful antigens for

XX vaccines and diagnostics.

XX Claim 2; Page 744; 1453pp; English.

XX AA253015 to AA254536, AA254577 to AA254615, and AAY74253 to AAY75941

XX represent novel Neisseria meningitidis and N. gonorrhoeae polynucleotides

XX and polypeptides. AA255137 to AA254576 and AA254616 to AA255473 represent

XX PCR primers used in the exemplification of the present invention. The

```
CC polypeptides, the polynucleotides, antibodies and compositions of the
CC invention can be used as vaccines, as diagnostic reagents, and as
CC immunogenic compositions. The polypeptides can be used in the manufacture
CC of medicaments for treating or preventing infection due to Neisseria
CC bacteria (e.g. meningitis and septicaemia), to detect the presence of
CC Neisseria bacteria, or to raise antibodies. They may also be used to
CC screen for agonists or antagonists, which may themselves have use as
CC antibacterial agents. The polynucleotides of the invention may also be
CC used in gene therapy protocols. (Updated on 12-SEP-2003 to standardise OS
CC field)
XX
SQ Sequence 297 AA;
Query Match 100.0%; Score 25; DB 3; Length 297;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Oy 1 XQXXVXHI 8
Db 247 GQGFVLIH 254
RESULT 191
ABP38279
XX ABP38279 standard; protein; 297 AA.
XX
AC ABP38279;
XX
XX 24-JUN-2002 (first entry)
XX
DE Staphylococcus epidermidis ORF amino acid sequence SEQ ID NO:3124.
XX
KM Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
XX antibacterial; gene therapy.
XX
OS Staphylococcus epidermidis.
XX
PN US6380370-B1.
XX
PD 30-APR-2002.
XX
PF 13-AUG-1998; 98US-00134001.
XX
PR 14-AUG-1997; 97US-0055779P.
XX 08-NOV-1997; 97US-0064964P.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
XX
PI Doucette-Stamm LA, Bush D;
XX
DR WPI; 2002-381255/41.
XX
DR N-PSDB; ABN90824.
XX
PT Novel isolated nucleic acid encoding a Staphylococcus epidermis
XX polypeptide, useful for diagnosing and treating bacterial infections.
PS Disclosure; SEQ ID NO 3124; 267pp; English.
XX
CC ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading
CC frame (ORF) nucleic acid sequences which encode the amino acid sequences
CC given in ABP5124 to ABP37960. The S. epidermidis sequences have
CC antibacterial activity and can be used in gene therapy. The sequences can
CC also be used in the diagnosis and treatment of bacterial infections,
CC particularly S. epidermidis infections. The sequences can be used to
CC screen for compounds able to interfere with the S. epidermidis life cycle
CC or inhibit S. epidermidis infection. N.B. The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from the USPTO web site
XX
SQ Sequence 297 AA;
Query Match 100.0%; Score 25; DB 5; Length 297;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Oy 1 XQXXVXHI 8
Db 44 IQGFVLIH 51
RESULT 192
ABU23174
XX ABU23174 standard; protein; 297 AA.
XX
AC ABU23174;
XX
XX 19-JUN-2003 (first entry)
XX
DE Protein encoded by Prokaryotic essential gene #8701.
XX
XX Antisense; prokaryotic essential gene, cell proliferation; drug design.
XX
OS Bordetella pertussis.
XX
PN W0200277183-A2.
XX
PD 03-OCT-2002.
XX
XX 21-MAR-2002; 2002WO-US009107.
XX
PR 21-MAR-2001; 2001US-00815242.
PR 06-SEP-2001; 2001US-00948893.
PR 25-OCT-2001; 2001US-0342923P.
PR 08-FEB-2002; 2002US-00072851.
PR 06-MAR-2002; 2002US-0362699P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Wang L, Zamudio C, Malone C, Haselebeck R, Ohlsen KL, Zyskind JW;
XX Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX
XX WPI; 2003-029926/02.
XX
DR N-PSDB; ACA27044.
XX
XX
XX New antisense nucleic acids, useful for identifying proteins or screening
XX for homologous nucleic acids required for cellular proliferation to
XX isolate candidate molecules for rational drug discovery programs.
PS Claim 25; SEQ ID NO 51098; 1766pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than S. aureus, S. typhimurium,
```


CC K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC the target prokaryotic essential genes. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 297 AA;

Query Match 100.0%; Score 25; DB 6; Length 297;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QXXXVXHI 8
:|::|::|
Db 92 RQHGVRIH 99

RESULT 193
AAU03198
ID AAU03198 standard; protein; 298 AA.

XX AAU03198;
XX 04-DEC-2001 (first entry)

DE Dynamamin consensus amino acid sequence #2.

XX Human; 40322 dynamamin; GTPase; clathrin-mediated endocytosis; brain;
XX neurological disorder; immune disorder; inflammatory disorder;
XX hematopoietic disorders; kidney disorder; lung disorder; gene therapy;
XX liver disorder; heart disorder; hyperproliferative disorder;
XX viral infection; cytotoxic; cytostatic; immunosuppressive;
XX vasotropic; cardiant; anti inflammatory; anti HIV; anti arthritic.

XX Synthetic.

XX Key Location/Qualifiers
XX 1. 298
XX /note= "Corresponds to amino acids 216-509 of human 40322
XX dynamamin (AAU03196)"

XX WO200164880-A2.

XX 07-SEP-2001.

XX 28-FEB-2001; 2001WO-US006511.

XX 28-FEB-2000; 2000US-0185503P.

XX (MILL-) MILLENNIUM PHARM INC.

XX Meyers RA;

XX WPI; 2001-550180/61.

PT Novel human dynamamin polypeptides and polynucleotides, useful for treating
PT lung disorders, liver disorders, spleen disorders, brain disorders, colon
PT disorders, immune disorders and heart disorders.

PS Disclosure; Fig 6A-B; 125pp; English.

XX The present invention relates to the isolation of a novel human dynamamin,
CC 40322 dynamamin and the nucleotide sequence encoding it. Dynamamin, a GTPase,
CC is involved in clathrin-mediated endocytosis and other intracellular
CC trafficking events such as synaptic vesicle recycling. The 40322 dynamamin
CC and the polynucleotide sequence encoding it are useful for the diagnosis
CC and treatment of dynamamin-related disorders such as brain and neurological
CC disorders (e.g. cerebral ischemia, Huntington's disease), immune and
CC inflammatory disorders involving the block of neuropeptide receptor
CC endocytosis (e.g. opioid disorders), haematopoietic disorders, kidney
CC disorders, lung disorders (e.g. pulmonary disease), liver disorders (e.g.
CC cirrhosis), heart disorders (e.g. heart failure), hyperproliferative
CC disorders (e.g. cancer) and infectious viral disorders. The

CC polynucleotide sequence encoding 40322 dynamamin can also be used in the
CC gene therapy for the treatment of cystic fibrosis. AAU03197-AAU03199
CC represent consensus amino acid sequences for dynamamin which are compared
CC to the the novel human 40322 dynamamin

XX Sequence 298 AA;

Query Match 100.0%; Score 25; DB 4; Length 298;
Best Local Similarity 50.0%; Pred. No. 6.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QXXXVXHI 8
:|::|::|
Db 69 NQELVSHI 76

RESULT 194
ABU40108
ID ABU40108 standard; protein; 300 AA.

XX ABU40108;

XX 19-JUN-2003 (first entry)

DE Protein encoded by Prokaryotic essential gene #25635.

XX Antisense; prokaryotic essential gene; cell proliferation; drug design.

XX Pseudomonas putida.

XX WO200277183-A2.

XX 03-OCT-2002.

XX 21-MAR-2002; 2002WO-US009107.

XX 21-MAR-2001; 2001US-00815242.

XX 06-SEP-2001; 2001US-00948993.

XX 25-OCT-2001; 2001US-0142923P.

XX 08-FEB-2002; 2002US-00072851.

XX 06-MAR-2002; 2002US-0362699P.

XX (ELIT-) ELITRA PHARM INC.

XX Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
XX Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX N-PSDB; ACAA3978.

PT New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX Claim 25; SEQ ID NO 68032; 1766pp; English.

XX The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a

CC obtained in electronic format directly from USPTO at
 CC seqdata.uspto.gov.uk/sequence.html?docid=20030055236.
 XX
 SQ Sequence 304 AA;

Query Match 100.0%; Score 25; DB 6; Length 304;
 Best Local Similarity 50.0%; Pred. No. 6.9e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXH 8
 Db 199 LQITVGH 206

RESULT 197

AAR97836
 ID AAR97836 standard; protein; 305 AA.

AC AAR97836;

XX 27-AUG-2003 (revised)

DT 11-SEP-1996 (first entry)

XX Kaposi's sarcoma associated herpesvirus virion polypeptide VP23.

XX Kaposi's sarcoma; gamma-2 herpesvirus; KSHV, therapy; diagnosis; vaccine;
 KW diagnosis; AIDS; virion polypeptide VP23.

XX Human herpesvirus 8.

XX Key Location/Qualifiers

FT Region 260..268
 /note="mitochondrial energy transfer motif"

XX WO9615779-A1.

XX 30-MAY-1996.

XX 21-NOV-1995; 95WO-US015138.

XX 21-NOV-1994; 94US-00343101.

XX 11-APR-1995; 95US-00420235.

XX (UYCO) UNIV COLUMBIA NEW YORK.

XX Chang Y, Moore PS;

XX WPI; 1996-268320/27.

XX N-PSDB; AAT30688.

XX Herpes virus associated with Kaposi's sarcoma - also definitive DNA
 PT sequences, useful for diagnosis of and to develop prods. for treatment of
 PT Kaposi's sarcoma.

XX Claim 17; Page 213-215; 277pp; English.

XX Lambda clone KS5 (AAT30681) is a fragment of a newly identified human
 CC gamma-2 herpesvirus associated with Kaposi's sarcoma (KS). KS has 17
 CC open reading frames (AAT30682-98), 15 of which are complete, including
 CC ORF26 (AAT30688), which codes for virion polypeptide VP23 (AAR97836),
 CC identified by sequence homology to known herpesvirus sequences. The
 CC protein products (AAR97830-46, respectively) of the 17 ORFs can be
 CC expressed in eukaryotic or bacterial host cells for use as vaccines, for
 CC KS diagnosis, or for raising antibodies. (Updated on 27-AUG-2003 to
 CC correct OS field.)

XX Sequence 305 AA;

Query Match 100.0%; Score 25; DB 2; Length 305;
 Best Local Similarity 50.0%; Pred. No. 6.9e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXH 8

DB 150 QQLLVYH 157

RESULT 198

AAR93612
 ID AAR93612 standard; protein; 305 AA.

AC AAR93612;

XX 27-AUG-2003 (revised)

DT 25-MAR-2003 (revised)

DT 13-AUG-1996 (first entry)

XX Kaposi's sarcoma associated herpesvirus virion protein.

XX Kaposi's sarcoma; KSHV, lymphoma; AIDS; vaccine; diagnosis; therapy;
 KW virion protein.

XX Human herpesvirus 8.

XX Key Location/Qualifiers

FT Region 260..268
 /note="mitochondrial energy transfer protein motif"

XX WO9606159-A1.

XX 29-FEB-1996.

XX 11-AUG-1995; 95WO-US010194.

XX 18-AUG-1994; 94US-00292365.

XX 21-NOV-1994; 94US-00343101.

XX 11-APR-1995; 95US-00420235.

XX (UYCO) UNIV COLUMBIA NEW YORK.

XX Chang Y, Moore PS;

XX WPI; 1996-151362/15.

XX N-PSDB; AAT16818.

XX Herpesvirus DNA associated with Kaposi's sarcoma - also associated
 PT vectors and proteins, used in detection and vaccination.

XX Claim 17; Page 226-228; 305pp; English.

XX Kaposi's sarcoma associated herpes virus (KSHV) clone KS5 (AAT16806),
 CC obtd. from a KS lesion genomic library, includes 15 complete ORFs and 2
 CC incomplete ORFs (AAT16807-23) named according to their herpesvirus
 CC salivary positional homologues. The virion protein (AAR93612) is the
 CC product of ORF26 (AAT16818). KSHV proteins and peptides may be obtd. by
 CC incorporating encoding sequences into a vector and expression in host
 CC cells. They are useful in vaccines or for raising antibodies of
 CC diagnostic or therapeutic value. (Updated on 25-MAR-2003 to correct PR
 CC field.) (Updated on 27-AUG-2003 to correct OS field.)

XX Sequence 305 AA;

Query Match 100.0%; Score 25; DB 2; Length 305;
 Best Local Similarity 50.0%; Pred. No. 6.9e+03;
 Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXH 8
 Db 150 QQLLVYH 157

RESULT 199
 ABG29631
 ID ABG29631 standard; protein; 307 AA.

AC ABG29631;

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XX 18-FEB-2002 (first entry)
XX
XX Novel human diagnostic protein #29622.
DE
XX Human, chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder.
XX
XX Homo sapiens.
XX
XX WO200175067-A2.
XX
XX 11-OCT-2001.
XX
XX 30-MAR-2001; 2001WO-US008631.
XX
XX 31-MAR-2000; 2000US-00540217.
XX
XX 23-AUG-2000; 2000US-00649167.
XX
XX (HYSE-) HYSEQ INC.
XX
XX Drmanac RT, Liu C, Tang YT;
XX
XX WPI; 2001-639362/73.
XX
XX N-PSDB; AAS93818.
XX
XX
XX New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity.
XX
XX Claim 20; SEQ ID NO 59990; 103bp; English.
XX
XX The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 307 AA:
SQ
Query Match 100.0%; Score 25; DB 4; Length 307;
Best Local Similarity 50.0%; Pred. No. 7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXXXVXHI 8
:|::|:|
Db 152 QGGIVKHI 159

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XX N. gonorrhoeae amino acid sequence SEQ ID 1960.
DE
XX Antibacterial; infection; vaccine; gene therapy.
KW
XX Neisseria gonorrhoeae.
XX
XX WO200279243-A2.
XX
XX 10-OCT-2002.
XX
XX 12-FEB-2002; 2002WO-IB002069.
XX
XX 12-FEB-2001; 2001GB-00003424.
XX
XX (CHIR-) CHIRON SPA.
XX
XX Fontana MR, Piza M, Maignani V, Monaci E;
XX
XX WPI; 2003-058415/05.
XX
XX N-PSDB; ABZ38685.
XX
XX New protein from Neisseria gonorrhoeae, useful for the manufacture of a
PT medicament for treating or preventing N. gonorrhoeae infection.
XX
XX Disclosure; Page 330; 815pp; English.
XX
XX The present invention relates to proteins from Neisseria gonorrhoeae.
CC Also disclosed are the nucleic acid molecules encoding the proteins and
CC antibodies that specifically bind to the proteins. The composition
CC comprising the protein, nucleic acid or antibody is useful for the
CC manufacture of a medicament for treating or preventing N. gonorrhoeae
CC infection, this may be in the form of a vaccine or gene therapy.
CC Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC molecules of the invention
XX
XX Sequence 307 AA:
SQ
Query Match 100.0%; Score 25; DB 6; Length 307;
Best Local Similarity 50.0%; Pred. No. 7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 1 XXXXXVXHI 8
:|::|:|
Db 257 QGGFVLHI 264

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Search completed: August 23, 2004, 11:10:50
 Job time : 108 secs

RESULT 200
 ABP77715
 ID ABP77715 standard; protein; 307 AA.
 XX
 AC ABP77715;
 XX
 DT 07-MAR-2003 (first entry)